

TO OUR VALUED SERVICE PARTNERS

DCS is a leading manufacturer of premium quality cooking and specialty appliances for both residential and professional use. We are proud of our reputation for quality and our commitment to customer satisfaction. We have set high standards for ourselves along with our network of independent Part Distributors and Service Agencies. As an Authorized Part Distributor or Authorized Service Agency we are counting on you to represent our company in a professional manner. We are here to help support you should you need assistance. Our technical support center is staffed by experienced technicians eager to help you. Your questions can be answered by DCS Customer Care Center by phone: 1-888-281-5698, email: support@dcsappliances.com, or by mail:

DCS

Attention: Customer Care Center

5800 Skylab Road

Huntington Beach, CA 92647

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INTRODUCTION

This manual contains information necessary for you to troubleshoot a DCS RGSC-305 self cleaning range. If the technical data you are looking for is not contained in this publication please call our technical support department at 888-396-2665 between the hours of 6:00 a.m. to 4:30 p.m. pacific standard time, Monday thru Friday.

Anytime you need information, or parts you will need a complete model and serial number. The rating plate is located behind the kickpanel, on the right side of the frame. DCS uses model numbers which describe the type of unit they represent. "RGSC" designates range, gas, self-cleaning. The number 305 indicates a 30" five burner range.

We have included sections on cooking and installations. In some cases a service problem is directly related to an improper installation or not following correct cooking practices. The information contained in these sections should help you in determining the origin of the condition for which the customer is concerned.



WARNING

If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.



WARNING

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

FOR YOUR SAFETY

If you smell gas:

- **Do not try to light any appliance.**
- **Do not touch any electrical switch; do not use any phone in your building.**
- **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
- **If you cannot reach your gas supplier, call the fire department.**

Installation and service must be performed by a qualified installer, service agency or the gas supplier.

PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE.

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PRELIMINARY

SAFETY PRACTICES & PRECAUTIONS

When properly cared for, your new DCS Appliance has been designed to be a safe, reliable cooking appliance. When using this restaurant caliber appliance, use it with extreme care, as this type appliance provides intense heat and can increase the accident potential. Basic safety precautions must be followed when using kitchen appliances, including the following:

- Read this Service Manual thoroughly **before** using your new appliance. This will help to reduce the risk of fire, electric shock, or injury to persons.
- Begin by insuring proper installation and servicing. Follow the installation instructions which came with this appliance. Be sure to have a qualified technician to install and ground this appliance before using.
- Have the installer show you where the gas supply shutoff valve is located so you will know how and where to turn off the gas to the appliance.
- If you smell gas, the installer has not done a proper job of checking for leaks. You can have a small leak and therefore a faint gas smell if the connections are not completely tight. Finding a gas leak is not a "do-it-yourself" procedure. Some leaks can only be found with the burner control in the "ON" position and for your protection it must be done by a qualified service technician.



WARNING:

Gas leaks may occur in your system and result in a dangerous situation. Gas leaks may not be detected by smell alone. Gas suppliers recommend you purchase and install an UL approved gas detector. Install and use in accordance with the manufacturer's instructions.

- If by some chance a burner goes out and gas escapes, open a window or a door to let the room air out. Do not attempt to use the appliance until the gas has had time to dissipate. Follow the instructions on page 1, "What to do if You Smell Gas".
- This appliance has been factory assembled for natural gas. It should be correctly adjusted by a qualified service technician or installer for the type of gas that is used.
- Do not repair or replace any part of this appliance unless it is specifically recommended in this manual. All other servicing should be referred to a qualified technician.

- **Children should not be left alone** or unattended in an area where appliances are in use. They should never be allowed to turn knobs, push buttons, sit or stand on any part of an appliance.
- Children in walkers, or children crawling can be attracted to the round oven door handle and may grab and open the oven door. This can result in injury from the door being pulled open on a child, or severe burns if the oven is in use and hot.



WARNING:

Do not store items of interest to children above or at the back of any appliance. Children could be seriously injured if they should climb onto the appliance to reach these items.

- **Never store anything in the oven or on the cooktop.** Flammable materials can catch fire, plastic items may melt or ignite and other types of items could be ruined.
- Do not hang articles from any part of the appliance or place anything against the oven. Some fabrics are quite flammable and may catch on fire.
- If the appliance is near a window **be certain the curtains do not blow** over or near the cooktop burners; they could catch on fire.
- Do not use water on grease fires. Turn all burners OFF, then smother fire with baking soda or use a dry chemical or foam-type fire extinguisher.
- Never let clothing, pot holders, or other flammable materials come in contact with, or too close to, any burner or burner grate until it has cooled. Fabric may ignite and result in personal injury.
- Be certain to use **only dry pot holders**: moist or damp pot holders on hot surfaces may cause burns from steam. Do not use a towel or other bulky cloth in place of pot holders. Do not let pot holders touch hot burners, or burner grates.
- For personal safety, **wear proper apparel**. Loose fitting garments or hanging sleeves should never be worn while using this appliance. Some synthetic fabrics are highly flammable and should not be worn while cooking.
- **Do not use aluminum foil** to line any part of the oven or cooktop. Using a foil liner could result in a fire hazard, or the obstruction of the flow of combustion and ventilation air. Foil is an excellent heat insulator and heat will be trapped underneath it. This trapped heat can upset the

SAFETY PRACTICES & PRECAUTIONS

cooking performance and can damage the finish of the oven or the cooktop parts.



WARNING:

This appliance is for cooking. Based on safety considerations, never use the oven or cooktop to warm or heat a room. Also, such use can damage the cooktop or oven parts.

- When using the cooktop: **Do not touch the burner grates or the immediate surrounding area.** Areas adjacent to the burners may become hot enough to cause burns.
- When using the oven: **Do not touch the interior surfaces of the oven, the exterior area immediately surrounding the door or the back trim.** The surfaces directly above the oven door may be hot if the oven has been operated with the door open, or if something has prevented the door from sealing.
- **Never leave the cooktop unattended** when using high flame settings. Boil overs cause smoking and greasy spill overs may ignite. More importantly, if the burner flames are smothered by a severe boil over which effects the igniter, unburned gas will escape into the room. See page 1.
- **Only certain types of glass, heat-proof glass-ceramic, ceramic, earthen ware, or other glazed utensils are suitable for cooktop use.** This type of utensil may break with sudden temperature changes. Use only on low or medium flames settings according to the manufacturer's directions.
- **Do not heat unopened food containers;** a build up of pressure may cause the container to burst.
- During cooking, **set the burner control so that the flame heats only the bottom of the pan** and does not extend beyond the bottom of the pan. This could heat and/or melt the handles.
- **Always use utensils that have flat bottoms large enough to cover the burner.** The use of undersized utensils will expose a portion of the flame to direct contact and may result in ignition of clothing.
- To minimize burns, ignition of flammable materials and unintentional spill overs, position handles of **utensils inward** so they do not extend over adjacent work areas, cooking areas, or the edge of the cooktop.

- **Hold the handle of the pan** to prevent movement of the utensil when stirring or turning food.
- **GREASE IS FLAMMABLE.** Let hot grease cool before attempting to handle it. Avoid letting grease deposits collect around the cooktop burners. Clean after each use or boil over.
- For proper lighting and performance of the cooktop burners, **keep the burner ports clean.** It may be necessary to clean these when there is a boil over or when the burner does not light, even though the electronic igniters click.
- Clean the cooktop with caution. Avoid steam burns; do not use a wet sponge or cloth to clean the cooktop while it is hot. Some cleaners produce noxious fumes if applied to a hot surface. Follow directions provided by the cleaner manufacturer.
- Be sure all the range and/or cooktop controls are turned off and the appliance is cool before using any type of aerosol cleaner on or around the appliance. The chemical that produces the spraying action could, in the presence of heat, ignite or cause metal parts to corrode.
- **Place oven racks in desired position while the oven is cool.** If a rack must be moved while the oven is hot, do not let the pot holders contact the hot interior of the oven.
- **Use care when opening the oven door.** Let hot air or steam escape before removing or replacing foods.
- Do not rub, damage, move or remove the door gasket. It is essential for a good seal during baking.
- **Clean the ventilator hood and filters above the range or cooktop frequently** so grease from cooking vapors does not accumulate on them.
- Turn the ventilator OFF in case of fire or when intentionally "flaming" liquor or other spirits on the cooktop. The blower, if in operation, could unsafely spread the flames.
- **Do not** obstruct the flow of combustion or ventilation air to the appliance. Be sure a fresh air supply is available.
- For safety reasons and to avoid damage to the appliance never sit, stand, or lean on the oven door or cooking surface.
- Service should only be done by authorized technicians. Technicians must disconnect the power supply before servicing this appliance.

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SAFETY PRACTICES & PRECAUTIONS

- California Proposition 65 - Warning: The burning of gas cooking fuel generates some by-products which are known by the State of California to cause cancer or reproductive harm. California law requires businesses to warn customers of potential exposure to such substances. To minimize exposure to these substances, always operate this unit according to the instructions contained in this booklet and provide good ventilation to the room when cooking with gas.

PRELIMINARY

INSTALLATION

CABINET PREPARATION

- 1) The range is a free standing unit. If the unit is to be placed adjacent to cabinets, the clearances shown in Fig. 1 are required. The same clearances apply to island installations.
- 2) The range can be placed in various positions with respect to the cabinet front, with the front either flush or projecting, depending on the countertop depth (See Fig. 2, page 4).
- 3) The gas and electrical supply should be within the zones shown in Fig. 1 & Fig. 3.
- 4) The maximum depth of over head cabinets installed on either side of the hood is 13".
- 5) Any openings in the wall behind the range and in the floor under the range must be sealed.
- 6) When there is less than a 12" clearance between combustible material and the back edge of the range, (above the cooking surface) a DCS Backguard must be installed (see Fig. 2). When clearance to combustible material is over 12", a DCS island trim may be used (see Fig. 2). The range comes equipped with island trim standard. (Fig. 2) indicate the space required for each type of backguard.
- 7) Always keep the appliance area clear and free from combustible materials, gasoline and other flammable vapors and liquids.
- 8) Do not obstruct the flow of combustion and ventilation air to the unit.

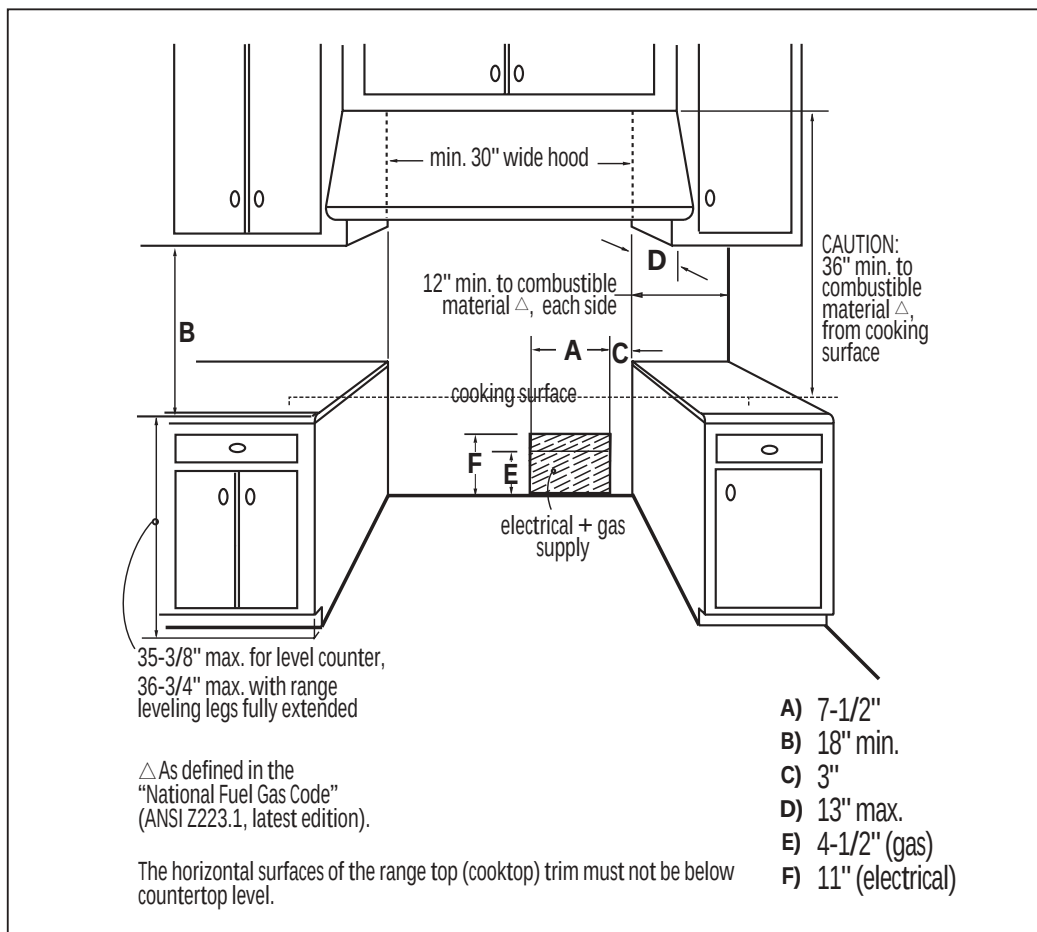


Fig. 1

PRELIMINARY

INSTALLATION

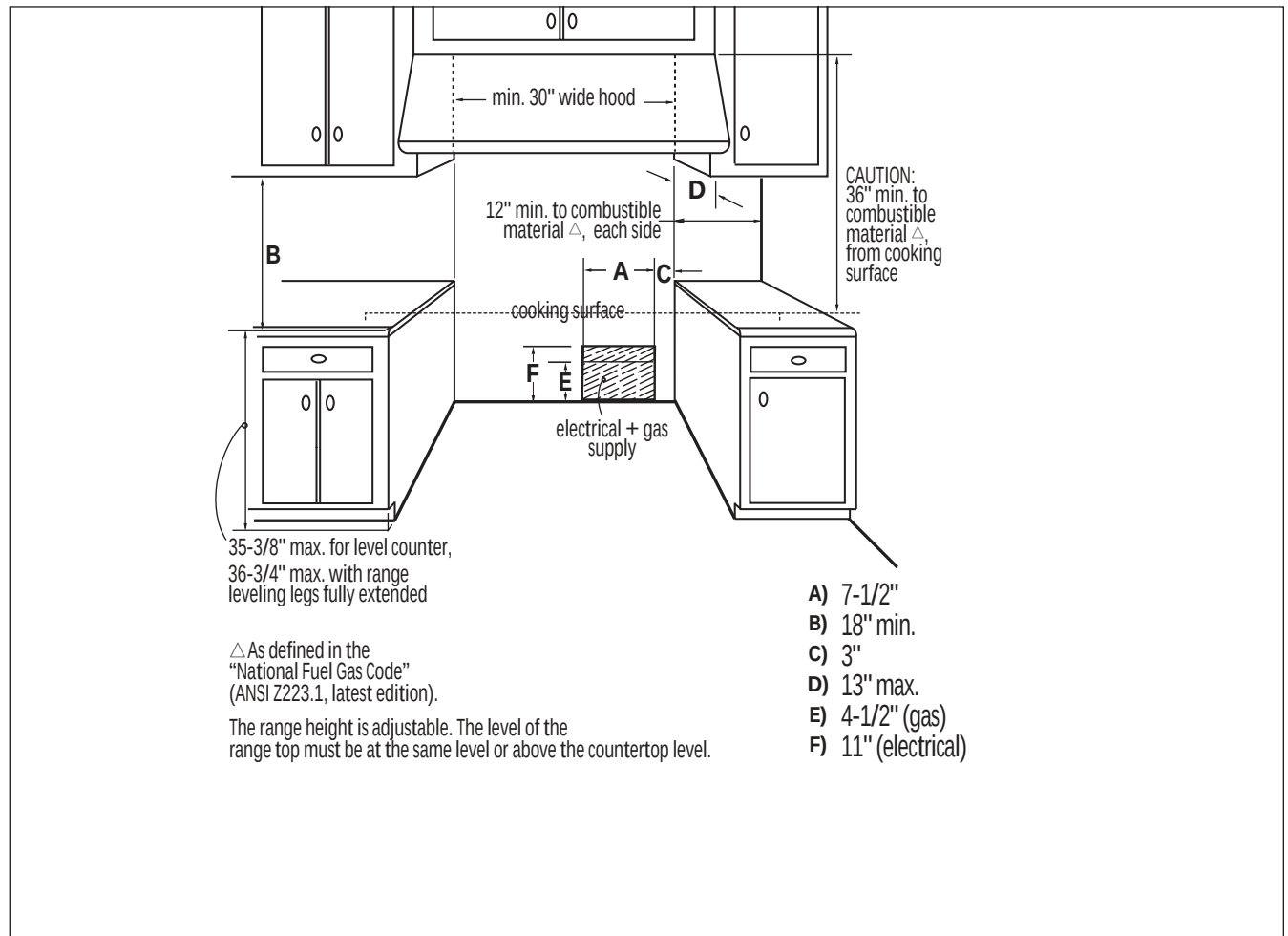


Fig. 2

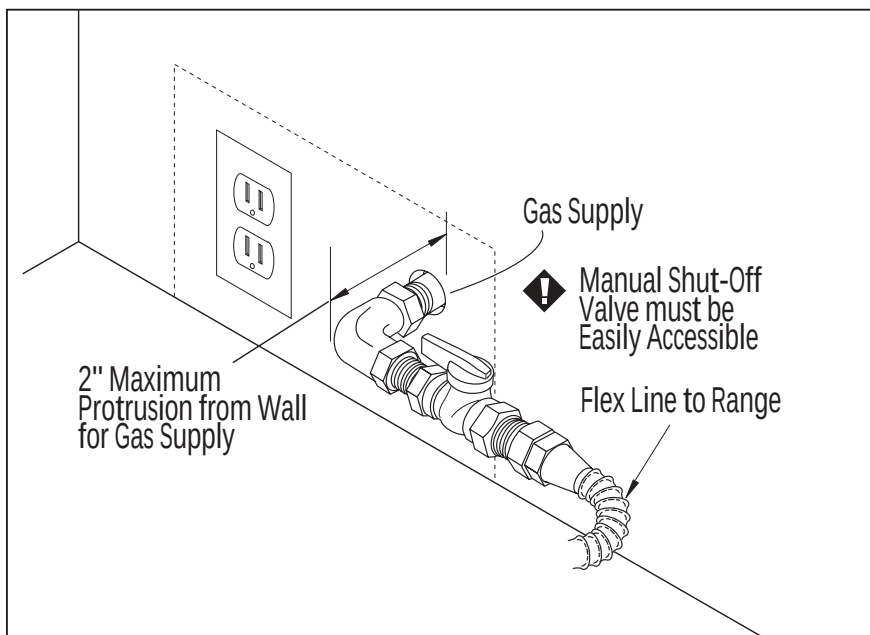


Fig. 3

INSTALLATION ELECTRICAL / GAS CONNECTIONS

POWER REQUIREMENTS

120VAC, 60 Hz., single phase.

4 Amp. Max.

(Use 15 Amp. Circuit)

Always disconnect electric supply cord from the wall outlet or service disconnect before servicing this appliance. Observe all governing codes and ordinances when grounding, in the absence of which, observe National Electrical Code ANSI/NFPA No. 70-1990.

RECOMMENDED GROUNDING METHOD

This appliance is factory equipped with a power supply cord with a three-prong grounding plug (with polarized parallel blades). It must be plugged into a mating grounding, type receptacle, connected to a correctly polarized 120 Volt circuit. If the circuit does not have a grounding type receptacle, it is the responsibility and obligation of the installer or user to have the existing receptacle changed to a properly grounded and polarized receptacle in accordance with all applicable local codes and ordinances by a qualified electrician. In the absence of local codes and ordinances the receptacle replacement shall be in accordance with the National Electrical Code. THE THIRD GROUND PRONG SHOULD NOT, UNDER ANY CIRCUMSTANCES, BE CUT OR REMOVED (See Fig. 4).

GAS

Verify the type of gas supplied to the location. The range is shipped from the factory set up and adjusted for natural gas. The unit can be readily converted to LP gas. After LP conversion, burner adjustment may be necessary.

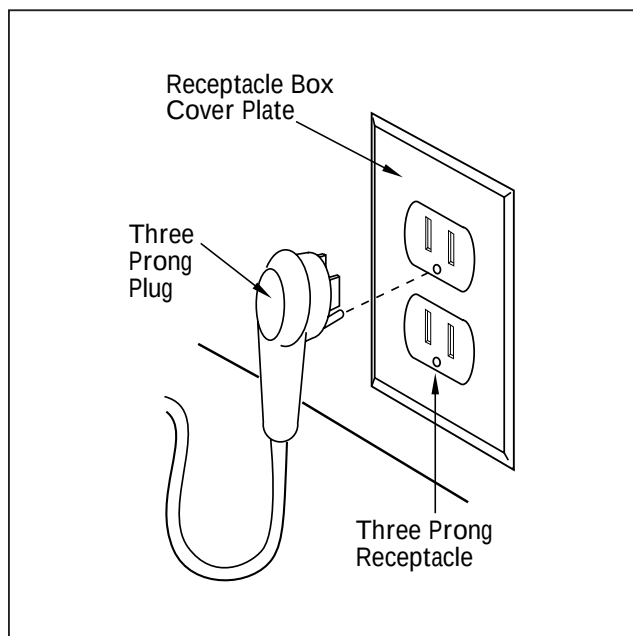


Fig. 4

NATURAL GAS REQUIREMENTS

- Connection: 1/2" NPT Minimum 5/8" dia. flex line.
- Pressure: 6" to 14" W.C.

LP GAS REQUIREMENTS

- Connection: 1/2" N.P.T. Minimum 5/8" dia. flex line.
- Pressure: Supply pressure must be 11" to 14" W.C.
- A regulator is required at the LP source to provide a maximum of 14" W.C. to the range regulator.

PRELIMINARY

INSTALLATION ELECTRICAL / GAS CONNECTIONS

HOOKUP

A manual valve is installed in an accessible location from the front for the purpose of shutting off the gas supply. The supply line must not protrude beyond the back of the unit. Make sure the gas supply is turned off before connecting the appliance. The flex line for the gas supply must be metal and be approved by CSA, AGA, CGA OR UL. Only use a metal supply hose, as the heat may cause a rubber hose to melt and develop leaks. The gas supply connections should be made by a qualified technician and in accordance with local codes or ordinances. In the absence of a local code, the installation must conform to the National Fuel Gas Code ANSI 223.1-1988, latest edition.

CAUTION:

The appliance must be isolated from the building's gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5kPa.). The appliance and its individual shut-off valve must be disconnected from the gas supply piping system during any pressure testing of the system at the test pressures in excess of 1/2 psig (3.5kPa.). When checking the manifold gas pressure, the inlet pressure to the regulator should be at least 7.0" W.C. for natural gas or 12.0" for LP.

When hooking up the gas supply from range rear hard pipe to wall hard pipe, installation length of flex line between range/wall hard piping must accommodate the range being pulled from wall for cleaning or servicing purpose. When range is pulled from wall, no strain should occur at range or wall hard pipe connections (See Fig. 5).

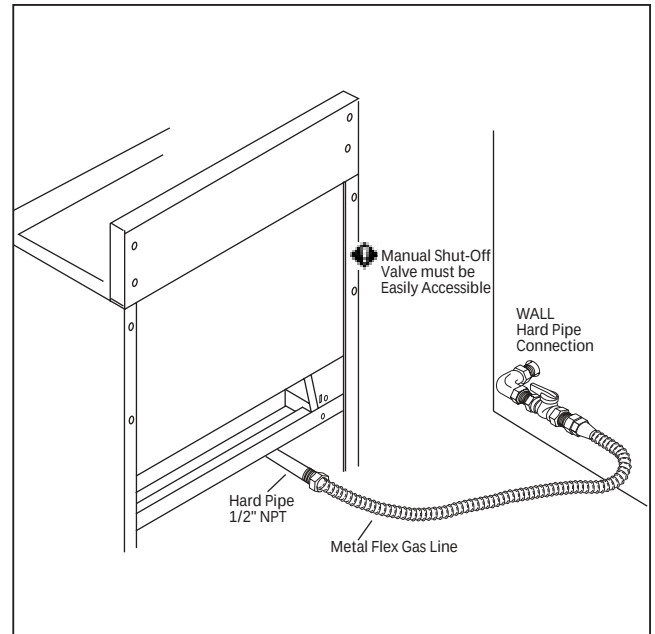


Fig. 5

NOTE: Pipe sealer must be used on pipe thread connections only.

ANTI-TIP DEVICE INSTALLATION INSTRUCTIONS

ANTI-TIP DEVICE INSTALLATION

All ranges must have an anti-tip device correctly installed as per these instructions. If you pull the range out from the wall for any reason, make sure that the device is properly engaged when you push the range back against the wall. If it is not, there is a possible risk of the range tipping over and causing injury if you or a child stand, sit or lean on an open door.

INCLUDED PARTS:

Included with this kit are: (4) #10 x 2" wood screws, (1) Anti-tip bracket, and (1) Installation Instructions.

INSTALLING THE KIT:

Instructions are provided for wood and cement floors. Any other type or construction may require special installation techniques as deemed necessary to provide adequate fastening of the Anti-tip bracket to the floor and wall. The use of this bracket does not preclude tipping of the range when not properly installed.

WOOD CONSTRUCTION:

Place the bracket against the back wall, into the right rear corner where the range is to be located. Leave a gap between the wall (or side of range) and the bracket of 3/4". Drill (2) 1/8" diameter pilot holes in the center of the small holes. A nail or awl may be used if a drill is not available. Fasten the bracket securely to the floor and wall. See Fig. 6.

Concrete or cement construction:

HARDWARE REQUIRED: (2) sleeve anchors, lag bolts, and washers (not provided). Locate the bracket as described above. Drill the recommended size holes for the hardware. Install the sleeve anchors into the holes and then install the lag bolts through the bracket. The bolts must be properly tightened as recommended for the hardware. Fasten the bracket securely to the floor and wall.

ONCE INSTALLED:

Complete the range installation per the instructions provided with the product. Check for proper installation of the Range and Anti-tip device by grasping the back of the unit and carefully attempt to tilt the range forward.

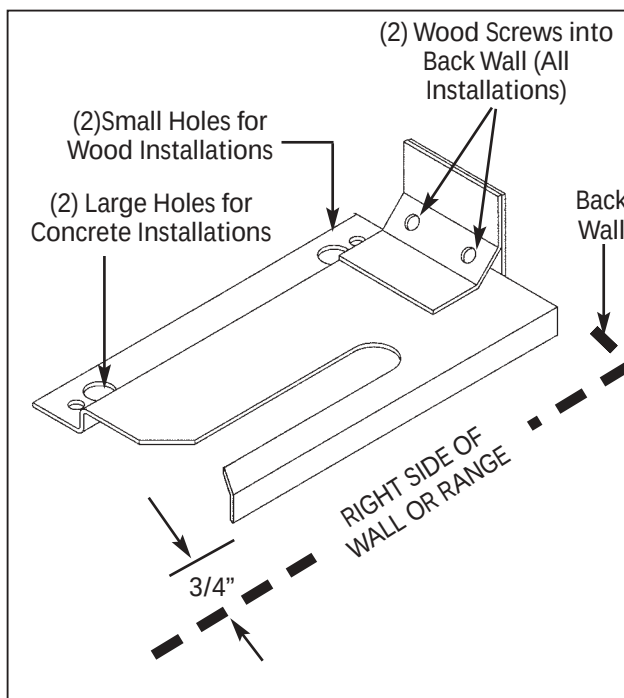


Fig. 6



Fig. 7

THE MANUFACTURE WILL NOT PAY FOR ANY DAMAGE DO TO MISSING OR IMPROPERLY INSTALLED ANTI-TIP DEVICE.

PRELIMINARY

BACKGUARD INSTALLATION

BACKGUARD INSTALLATION

The backguard is installed after the gas connection is made. The backguard must be installed when there is less than a 12" clearance between combustibles and the back of the range (above the cooking surface) (See Fig. 1, page 3).

BACKGUARD KITS:

The backguard is located, as shown in Fig. 8. Secure the backguard to the wall behind the range. Specific instructions for installation of the full backguard or low backguard can be found packaged with the backguard.

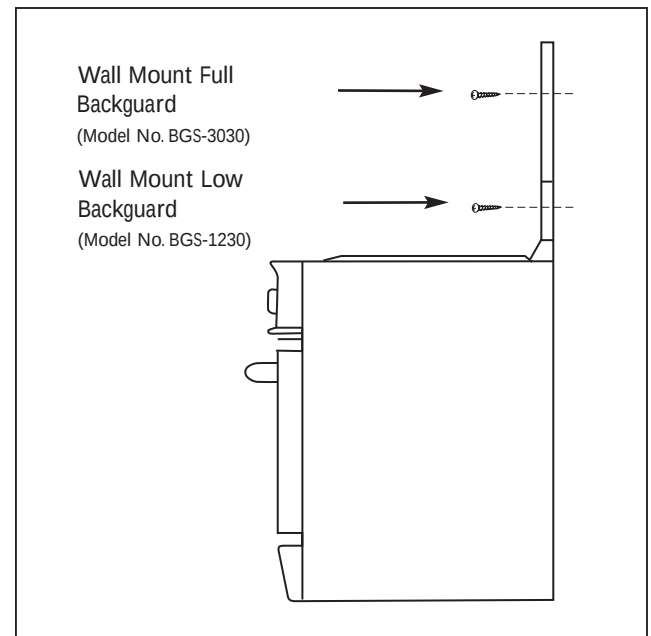


Fig. 8

FLAME CHARACTERISTICS

PROPER FLAME SIZES

Sealed Top Burner Lighting Note:

The sealed top burners have an infinite number of heat settings and there are no fixed positions on the control knobs between HI and LO. To turn the sealed top burner on, push in on the control knob and turn it counter-clockwise to the "LITE" position. An audible clicking sound will be heard. When the gas has been ignited by the electronic spark igniter, turn the knob to the desired setting.

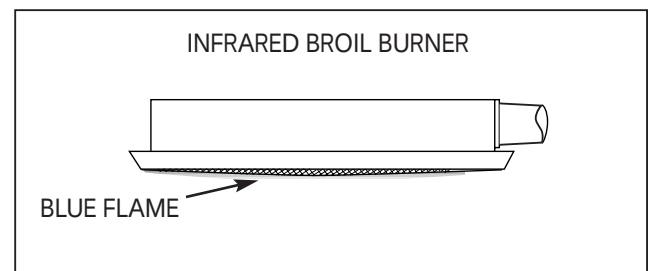


Fig. 9

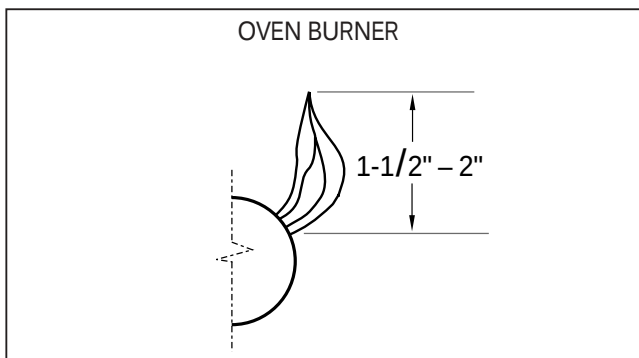


Fig. 10

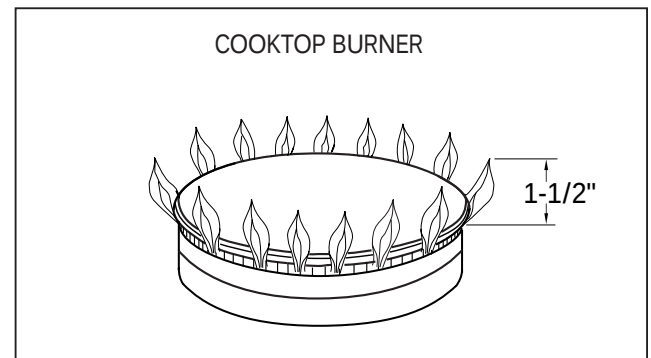


Fig. 11

COOKTOP USE

BURNERS

The professional gas range is equipped with burners typical of those used in restaurants. These burners are designed for maximum cleanability and controllability. The large cap spreads the simmer burner heat out to avoid too much heat being concentrated on the center of the pan. The simmer burner is always on when the burner is in use. The burner should never be operated if the cap is not in place. (Fig. 12)

All the cooktop burners have electronic spark ignition to eliminate continuously burning pilots, when the main burner is on and the flame is blown out, it will relight automatically.

Simmering

The professional cooktop has exceptionally low simmering capabilities. The large cap serves as a heat diffuser to spread out the heat to avoid having a center hotspot. Keep in mind that because of the high heat capacity of the outer burner, and the mass of the cast iron burner grates (they retain heat longer than lighter, conventional grates) some foods may continue to cook by retained heat after the burner has been turned off.

After lighting the main burner, turn the main burner knob down to the simmer burner position. Should a strong draft or boil over extinguish the simmer flame it will relight automatically as the main burner would. (Fig. 13)

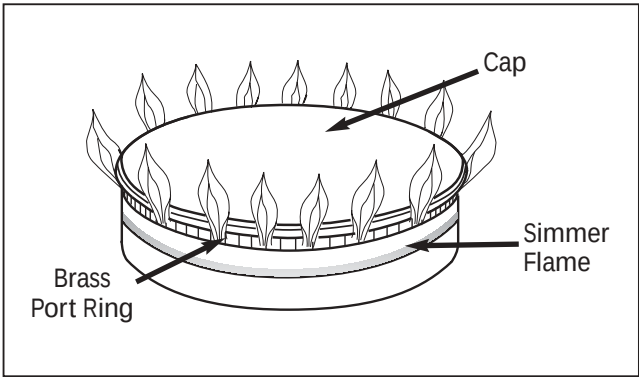


Fig. 12

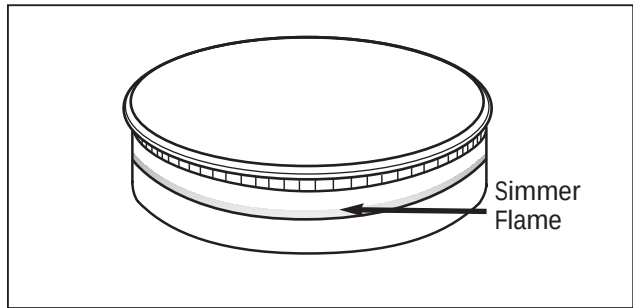


Fig. 13

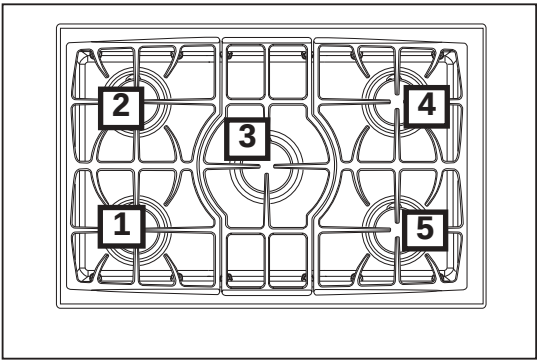


Fig. 14

Burner Location	Max. Btu/hr		Low/Simmer Btu/hr	
	Nat	LP	Nat	LP
1,2,4,5	16,000	14,000	500-1,200	500-1,200
3	17,500	14,000	500-1,200	500-1,200

PRELIMINARY

COOKTOP USE

ELECTRONIC IGNITERS

If a burner does not ignite, listen for the clicking sound. If the igniter is not clicking, TURN OFF THE BURNER. Check the circuit breaker for a blown fuse or a tripped circuit breaker. (Fig. 15)

BURNER EFFICIENCY AND FLAME CHARACTERISTICS

It is necessary to keep the burner ports and the igniters clean for proper lighting and efficient performance of the cooktop burners.

The burner flame should burn completely around the burner with no excessive noise or lifting. The flame should be blue in color and stable with no yellow tips. (Fig. 16)

An improper air-gas mixture may cause either a burner flutter or a yellow tipped flame. A technician should adjust the flame. During initial use, foreign particles in the gas line, or dust in or in the air around the appliance may cause an orange flame. This will disappear with use.

NOTE: *If you are using propane gas, a slight pop or flash may occur at the burner ports a few seconds after the burner has been turned "off". This "extinction pop" is normal for propane gas.*

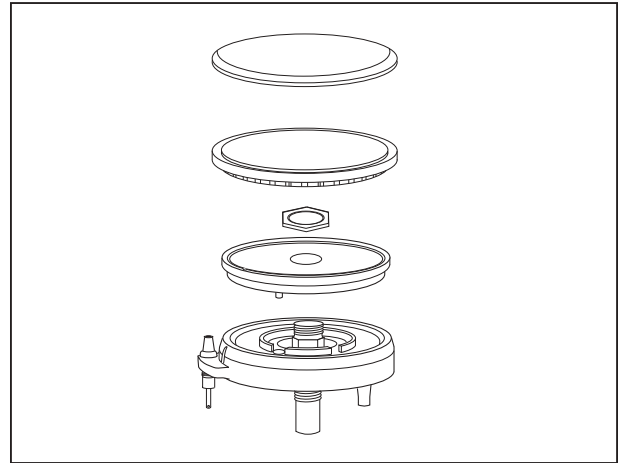


Fig. 15

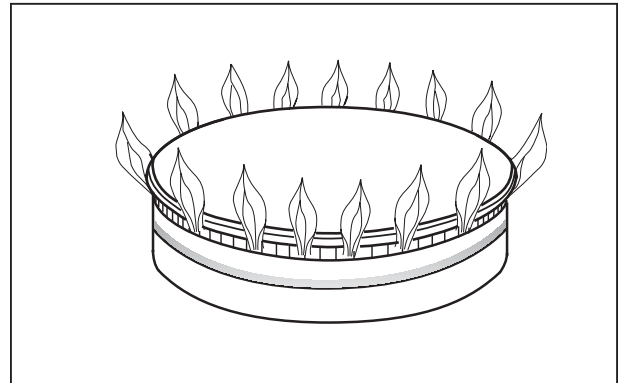


Fig. 16

OVEN USE

GENERAL

Your large new oven can be used in four cooking modes; convection bake, regular bake, convection broil, or regular broil. To help you decide which way to cook your food read this information first. Remember this is a new oven and the thermostat has been checked for accuracy. Your old oven may have had a thermostat that over the years got a little hot or a little cold. Check your recipes for the correct time and temperature and don't use the old time or temperature you were using to compensate for your old oven being off temperature.

Burners

Your new professional gas range is equipped with bake and broil burners typical of those used in restaurants. The oven broiler burner is 15,000 Btu/hr and the oven baking burner is 28,000 Btu/hr.

Electric Glow Igniter

The oven bake and broil burners are equipped with an electric glow igniter and safety system which lights the gas. There will be a delay after the control knob has been turned on to when you actually hear gas arrive at the burner. The burner will ignite after the gas reaches the burner.

USING CONVECTION BAKE AND REGULAR BAKE

To Set the Oven for Convection Bake and Bake



Fig.17

Decide if you are going to use CONVECTION BAKE or BAKE. These cooking modes are for baking, roasting or warming; using one, two, three or four racks. If you are going to use regular Bake push the Bake Switch (located on the Control Panel) and turn the oven control knob to the temperature used in the recipe. To use Convection

Bake push the Convection Bake button (located on the control Panel) and turn the oven control knob to the temperature desired.

Preheating

Preheating takes about 10 to 15 minutes depending on the temperature set. Preheating is usually necessary for foods baked at high temperature for a short period of time, i.e. drop cookies. The oven heating light will turn off when the oven has reached temperature.

Condensation

During any cooking process there is a certain amount of moisture that evaporates from the food. The amount of moisture that condenses on the oven depends on the moisture content of the food. The moisture will condense on any surface that is cooler than the inside of the oven, such as the control panel or the top of the door.

CONVECTION BAKE

Convection Bake is baking with a fan at the back of the oven circulating the hot air in a continuous pattern around the food. This circulating hot air heats and browns the surface of the food more effectively than in a standard oven. This allows most foods to be cooked at lower oven temperatures or in less time, if baked at the regular temperature. The air is recirculated and reheated. Uncovered, longer cooking foods such as large pieces of meat or other foods that can be cooked in low sided baking utensils or air leavened foods, are where you will see the most savings in cooking time. Using multiple racks at the same time will achieve a good time saving, as you can cook more food at the same time. The number of recipes requiring preheating of the oven is reduced considerably because the heat reaches the food faster as the hot air circulates around the food.

Foods Suitable for Convection Bake

Air Leavened Foods (Angel Food Cake, soufflés, cream puffs, meringue shells)

Appetizers

Breads

Main Dishes

Oven Meals (1 to 4 racks)

Cookies

Pies

Poultry

Roasts

OVEN USE

Converting Recipes to Convection Bake

Low sided baking utensils will give the best results as the hot air can reach all sides of the food easier. The oven temperature can be left the same as the recipe and the food cooked a shorter period of time. The temperature can be lowered 25°F to 50°F and the food will probably take the same length of time to cook as the recipe states. If you find that food is adequately browned on the outside, but not done in the center, lower the temperature another 25°F and add to the baking time. When reducing the temperature **always check the food for doneness, a minute or two before the minimum time** stated in the recipe, as time can always be added. Some recipes will cook faster than others. There is no way to predict exactly how long each recipe will take when you convert it to convection. Convection will be easier to use after you have used it a few times as you will begin to understand the way it bakes.

Selecting Utensils for Convection Bake

Cooking by convection does not require any specially designed baking utensils. You probably have many utensils in your kitchen that are suitable to use. When choosing a baking utensil, consider the material, the size and the shape as they all affect the baking time, the palatability and the appearance of the finished product.

Metal bakeware (aluminum, steel and cast iron) all result in the fastest cooking time and the best end product. Aluminum pans work best for all types of baked goods. For the best browning, use a pan with a dark or dull finish that absorbs heat, when baking pies and breads. A shiny finish works best for cakes and cookies, since it reflects some of the heat and provides a more tender surface. Cookie sheets with only one lip will give the best results, as the heated air can circulate all around the sides of the food. For roasting, use the bottom of the broil pan and elevate the meat on a metal roasting rack. Glass-ceramic or glass utensils do not conduct heat as well as metal, but they can be used. Use them for foods that do not require a dark brown crust or crisping, such as soufflés.

Baked items cook more quickly and evenly if they are individually smaller in size, i.e. two or three small foods do better than one large piece. When single food items are baked, always center the food on the rack. If several foods are being baked, space them evenly on the rack or racks.

Racks Positions

One to four racks can be used simultaneously during

convection baking. Place the rack(s) in the desired position before turning the oven on. Store the unused racks out of the oven.

Rack position 2 (second from bottom) will probably be used the most for single rack convection baking.

When baking on more than one rack you do not need to stagger the pans. Allow at least 1" of space between the oven walls and the pans so the heated air can circulate. Pans should be placed in center of oven, stacked above each rack.

Regular Bake

Bake is baking with hot air; there is no fan. The air movement comes from natural convection - as the air heats, it moves to the top of the oven. This oven mode is the same as you have been using for baking on one or two racks.

Foods Suitable for Bake

Appetizers
Pies, Cakes
Breads
Desserts
Main Dishes
Oven Meals (1 to 2 racks)
Poultry
Roasts

CAUTION:

Aluminum foil should never be used to cover the oven racks or to line the oven bottom. The trapped heat can damage the porcelain and the heated air cannot adequately reach the food being baked.

Rack Positions

One or two racks can be used simultaneously during bake. Place the rack(s) in the desired position before turning the oven on. Store any unused racks out of the oven.

Rack position 2 (second from bottom) will probably be used the most for single rack baking.

If you are using two racks simultaneously, be sure to check the food on the bottom rack sooner than the minimum time. The food on the lower rack position may

OVEN USE

cook slightly faster than the food on the upper rack, particularly if you are using large baking utensils. If you are using two racks simultaneously, be sure to stagger the baking utensils so that one is not directly above the other and the heated air can circulate freely around each pan. Allow at least 1" of space between the oven walls and the pans.

If using large or commercial size baking utensils, the food may take a few extra minutes as the air cannot circulate as freely as it does with a smaller pan. When using commercial size baking utensils, use only one rack as the heat does not have the room to circulate.

To Get the Best Results

Baking:

- Follow the recipe amounts and ingredients, including the size and shape of the baking utensil recommended in the recipe.
- Do not open the oven door "just to peek"; use the interior oven light and look through the window.
- Do not use the oven for storage, especially when baking in the oven. Extra utensils, not being used for baking, can affect the food product, baking time, browning, and end result.
- If you are using glass utensils, lower the temperature 25°F.
- Use a minute timer and set it for the minimum time suggested in the recipe.

Convection Baking:

- Follow the first three recommendations above.
- Metal utensils give better results, in convection, than do glass baking utensils. If you use glass, it usually is not necessary to lower the temperature an additional 25°F.
- Use a minute timer and set it for less than the minimum time suggested in the recipe. The first time you use a recipe in the convection mode, be sure to note the new baking time on your recipe for future reference.
- Be sure to read the basic information on convection before using the oven for the first time, page 14-16.
- Keep in mind that convection baking results vary, depending on type of product. In many cases standard bake yields superior results over convection.

USING CONVECTION BROIL AND BROIL

To Set the Oven for Convection Broil and Broil

CAUTION:

Pay special attention when setting the Oven Control knob on "BROIL". If you set the knob past the "BROIL" setting, the burner will not ignite.



Fig. 18

Decide if you are going to use BROIL or CONVECTION BROIL. If you are going to use regular broil push the Broil button (located on the Control Panel) and turn the Oven Control knob to "BROIL". To use Convection Broil push the Convection Broil button (located on the Control Panel) and turn the Oven Control knob to "BROIL". The burner will ignite after the gas reaches the burner. The "oven on" indicator light will come on to let you know that the broiler is currently on. During the broiling process, the infra-red burner produces such an intense heat that the burner will cycle on and off to maintain an efficient yet safe interior cooking environment.

The HEATING indicator light on the valve panel cycles on and off with burner to let the user know when the burner is lit. This cycling process is used to evenly distribute and safely control the intense heat that the broil burner produces. The cycling feature prevents the burner from producing range-damaging heat.

Rack Position

The rack position depends on the type and thickness of the food. Thick pieces of meat or poultry (1" or more) would typically be broiled or convection broiled on rack position 3. Steaks, chops and hamburger would typically be broiled on rack position 4. If top browning casseroles or bread, the thickness of the food would indicate the rack position. Casseroles and bread would typically be

OVEN USE

browned on rack position 2 (see instructions below for more information). (The numbering of the rack positions is from the bottom to the top - #1 being the bottom position)

Preheating

For best broiler performance, preheating for 10 minutes improves searing of the food's outside layer, seals in natural juices and flavors, gives a more even cooking pattern, and takes less time to cook.

Convection Broil

Convection Broil is cooking by intense infrared radiant heat supplied by the broil burner while a fan at the back of the oven circulates hot air in a continuous pattern around the food. Convection broil cooks the food with better results for thicker cuts of meat. The meat sears on the outside and retains more juices and natural flavor inside with less shrinkage.

<i>Foods Suitable for Convection Broiling:</i>	<i><u>rack position</u></i> (#1 is from bottom to top)
Thicker Cuts of Meat (1" or more)	#3
Thicker, Irregular-sized Pieces of Poultry (1" or more)	#2 or #3
Thicker Pieces of Fish (1" or more)	#3
Top Browning: Casseroles and Breads	#2 or #3

Regular Broil

Broil is cooking by intense infrared radiant heat supplied by the broil burner located at the top of the oven.

<i>Foods Suitable for Broiling:</i>	<i><u>rack position</u></i>
Appetizers	#3 or #4
Meats, Poultry, Fish (under 1")	#4
Top Browning: Casseroles and Breads	#2 or #3

NOTE: The broiler pan for both broiling and convection broiling should be placed all the way to the back of the oven and centered on the rack for best results.

Using a Meat Thermometer to Broil and Convection Broil

To accurately determine the doneness of a thick steak or chop (1-1/2 inches thick or more), use a meat thermometer. Insert the point of the thermometer into the side of the meat to the center. Cook the first side to 90°F for rare meat. Cook the first side to 100°F for medium to well done. Cook the second side to the desired degree for the doneness you want, 140°F to 145°F for rare, and 150°F to 155°F for medium and 160°F to 165°F for well done. If you are cooking pork, cook to 160°F.

A large two-piece broil pan comes with your new range. When you are broiling, always use both pieces. Do not cover the grid with aluminum foil. This slotted grid allows the grease drippings to flow into the bottom of the pan keeping it away from the intense heat of the infra-red broiler burner. This helps to minimize the smoking and spattering of the grease.

To Get the Best Results

- Defrost the food before starting to cook.
- Put food on broiler pan, center and push broiler pan to the very back of oven rack.
- Set a minute timer for the minimum time to check the food.
- Steaks should be at least one inch thick, if a rare doneness is desired. It is difficult to get rare with meat that is thinner, or to get a nice brown piece of meat.
- After half the total cooking time, turn the food over only once. It is not necessary to turn over thin foods (fillet of fish, ham slices, etc.). Liver slices must be turned over.
- Use a two-piece broil pan. Two-piece broil pans are designed to minimize smoke and spatter. DO NOT cover the slotted grid with aluminum foil. This will catch the grease and could cause a fire.
- When top browning use metal or glass-ceramic bakeware. DO NOT use heat-proof glass or pottery as this type of glassware cannot withstand the intense heat of the broiler burner.

NOTE: You cannot use the broiler burner and the bake burner at the same time. When one is on, the other cannot be turned on.

OVEN USE

NOTES:

High Altitude Baking

Recipes and baking times vary if you are baking at a high altitude. For accurate information write to the Agriculture Extension Service, Colorado State University, Fort Collins, Colorado 80521. Specify the type of information and the baking mode (convection bake or bake) you need, i.e. cakes, cookies, breads, etc. There may be a cost for the bulletins.

To Use the Oven for Slow Cooking or Low Temperatures

The oven can be used to keep hot food hot, to dehydrate food, to warm plates, for slow cooking (as in a crock pot), and to defrost foods.

You can keep hot, cooked food at serving temperature. Set the oven to the temperature suggested in the chart. Rare meat must be eaten when it is removed from the oven, as it continues cooking from its own heat.

To keep food moist, it must be covered with aluminum foil or a lid.

To dehydrate food, follow suggestions in a recipe.

To warm plates, check with the dishware manufacturer for the temperature for the recommended.

To use the oven as a slow cooker set the oven control knob to 225°F. Place the food in the oven in a pan with a tight fitting lid. Follow recipes for this type of cooking.

To thaw uncooked frozen food, set the oven control knob to "warm". Be sure the food is tightly wrapped in foil. Thaw the food just enough to handle it. Cook immediately. Do not refreeze.

To thaw frozen cooked food, set the oven control knob to 170°F. Loosen the freezer wrapping. Do not use plastic wrap or wax paper in the oven.

FOOD SAFETY:

According to the United States Department of Agriculture you should not hold foods at temperatures between 40°F to 140°F for longer than 2 hours.

PRELIMINARY

CARE AND MAINTENANCE

BURNERS

For proper lighting and performance keep the burners clean. It is necessary to clean the burners if they do not light even though the igniter clicks, if there has been a severe boil over, or when the flame does not burn blue. Be certain all burner knobs are in the off position before attempting to clean the burners. The burners have been designed for ease in cleaning. When the grates and burners are cool, remove the grate. The Burner Cap and the Brass Port Ring can easily be lifted off. Wash these parts in hot soapy water, rinse and dry thoroughly. The Burner Caps are porcelain enamel, follow the directions on the previous page that were given for the burner grates. A bristle brush can be used to clean out the toothed burner ports, if necessary. Disassembly of the Simmer Ring is not recommended, however, it may become necessary to do so if the ports remain clogged after normal cleaning. If it is necessary to disassemble the Simmer Ring from the Base, remove the Hex Nut at the top of the Simmer Ring. Clean the Simmer Ring with hot soapy water using a soft wire or plastic bristle brush then dry thoroughly. Re-assemble the parts using the Hex Nut.

After cleaning, it is important to make sure the Locating Pin on the bottom side of the Simmer Ring is properly aligned with the corresponding hole in the Base and that the Locating Pin (see insert) in the bottom side of the Brass Port Ring is properly aligned with the Locating Notch on the top side of the Simmer Ring. Incorrect alignment will produce a potentially dangerous flame and poor burner performance. See Fig. 19.

IGNITERS

Wipe with a water dampened cotton swab. Be careful not to damage the igniter. (See Fig. 20)

CONTROL KNOBS - COOKTOP AND OVEN

These are plastic and can be cleaned in hot, soapy water. To remove the knobs from the control panel, grasp the knob and pull straight towards you. Wash, do not soak. Rinse and dry thoroughly. It is important to replace these knobs on the correct gas valve on the control panel.

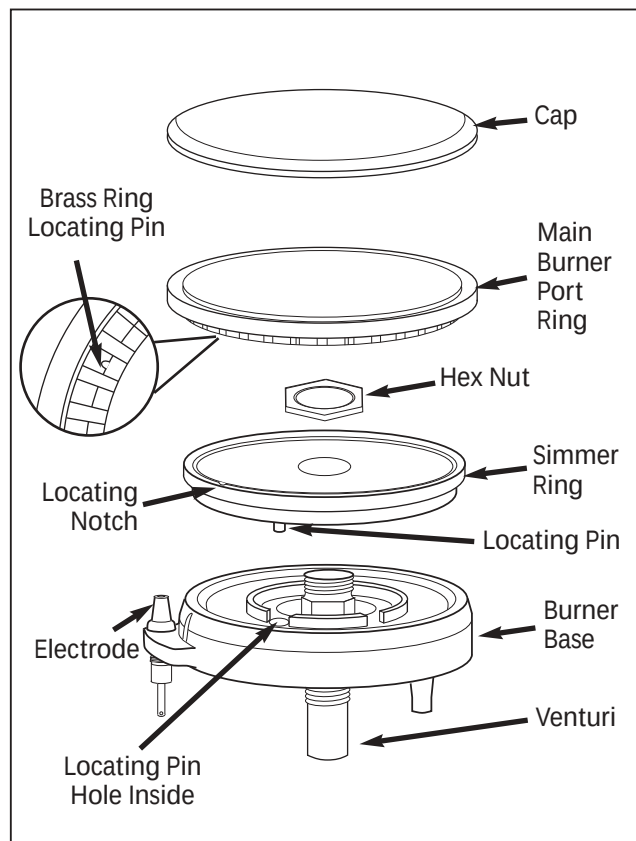


Fig. 19

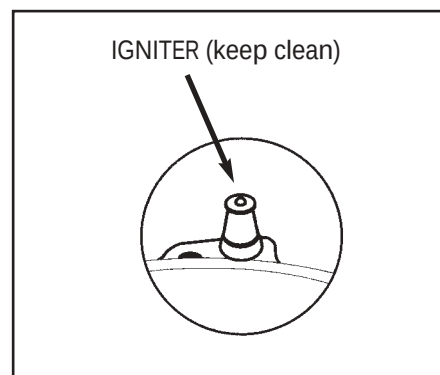
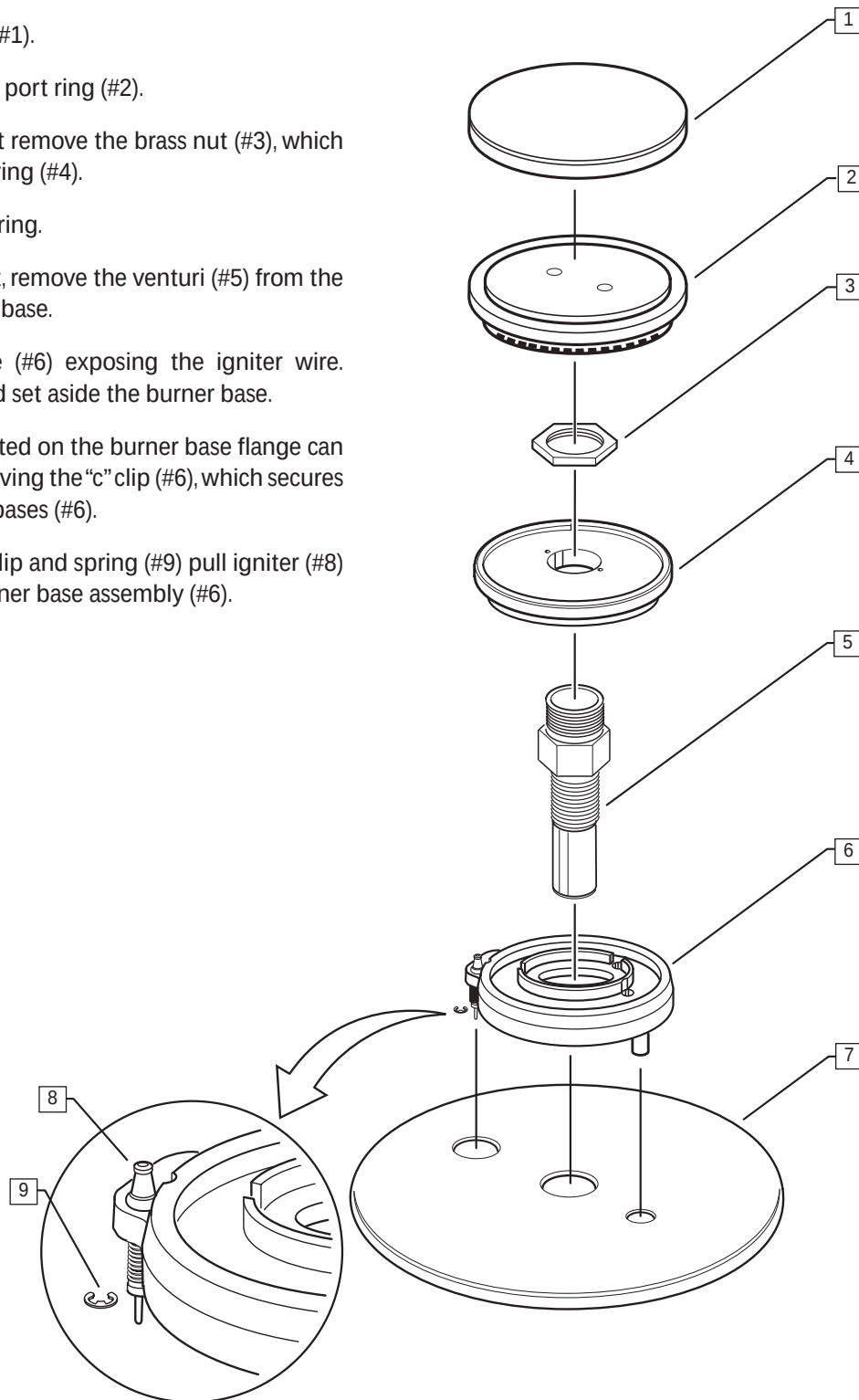


Fig. 20

SEALED BURNER DISASSEMBLY

TO REPLACE THE BURNER IGNITERS, FOLLOW THESE STEPS:

- A) Remove burner cap (#1).
- B) Remove main burner port ring (#2).
- C) Using a 11/16" socket remove the brass nut (#3), which secures the simmer ring (#4).
- D) Remove the simmer ring.
- E) Using a 13/16" socket, remove the venturi (#5) from the center of the burner base.
- F) Lift up burner base (#6) exposing the igniter wire. Remove the wire and set aside the burner base.
- G) The igniters (#8) located on the burner base flange can be removed by removing the "c" clip (#6), which secures them to the burner bases (#6).
- H) After removing the clip and spring (#9) pull igniter (#8) straight up from burner base assembly (#6).



PRELIMINARY

COMPONENT ACCESS

OVEN DOOR REMOVAL

1. Open the door in the full open position.

NOTE: Light pressure may have to be applied on the door to close the hinge latches.

2. Rotate locking tabs on hinges so that bottom and top are locked together (fig. 21).

3. The door can then be removed by lifting and pulling the door on approximately 60° angle with the hinges up and out of the front frame (fig. 22).

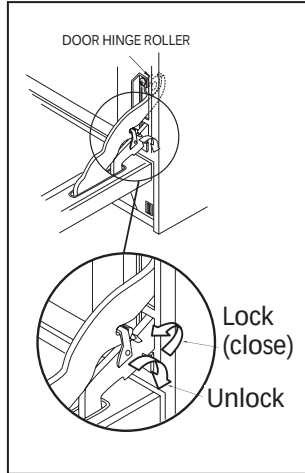


Fig. 21



Fig. 22



WARNING:

The door is about 33 pounds.

NOTE: If in event that the oven door comes off track, or becomes misaligned, the door **MUST** be removed from the range in order to reset the hinges. Open the door to the broil stop. Get a firm grip on the door. Remember the door is heavy. Lift the door and pull at the same time to remove the range. It is normal to hear a loud bang when the door is being removed. Once the door has been removed, lay it down on a protected floor with the handle down. With protection on your hand, lean over the top of the door and push the large hinge away from the door to connect the small hinge to the large hinge using the lock. Note that the longer arm is spring loaded and is VERY hard to move. Once the hinges are set, the door can be reinstalled. Place the door at the same angle when it was removed. Evenly slide the door back into place and check

to assure the hinges rest in the center of each door hinge roller. With the oven door fully open, unlock the hinge latches and the door is ready to close again.

If this procedure does not correct the misalignment, contact DCS Customer Care Center (See page 51).

KICK PANEL REMOVAL

1. Disconnect power supply

2. Remove the two (2) Phillips head screws securing kick plate (fig. 23).

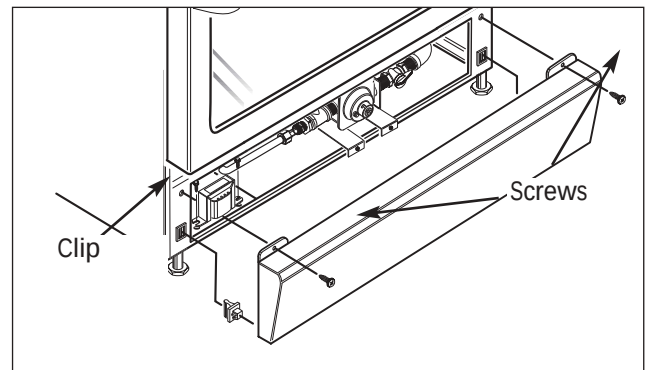


Fig. 23

3. Pull the bottom of the kick panel out to unsnap clips and remove.

BAKE IGNITER

1. Disconnect power supply

2. Follow step in door and kick panel removal (fig. 21, 22, 23).

3. Remove oven racks and oven floor by slipping floor forward and up to remove (fig. 24).



Fig. 24

4. Locate igniter, remove screw. Gently pull igniter out of location (fig. 25).

COMPONENT ACCESS



Fig. 25

5. Follow wire through oven wall to connection below. Remove wire nut (fig. 26 and 27).



Fig. 26



Fig. 27

CONVECTION FAN

1. Follow door removal (fig. 21 and 22). Remove oven racks and oven floor.
2. Remove the two (2) screws holding the convection baffle in place.
3. Remove the (4) bolts holding convection cover in place. Remove cover (fig. 28).



Fig. 28

4. Remove four 7/16" bolts holding convection motor assembly (fig 29).



Fig. 29

5. Support motor assembly inside oven and remove wire nuts.

TRANSFORMER AND RELAY ASSEMBLY

1. Disconnect power supply
2. Follow kick panel removal step (fig. 23).
3. Remove (2) 5/16" bolts holding transformer bracket. Disconnect wire harness (fig. 30).

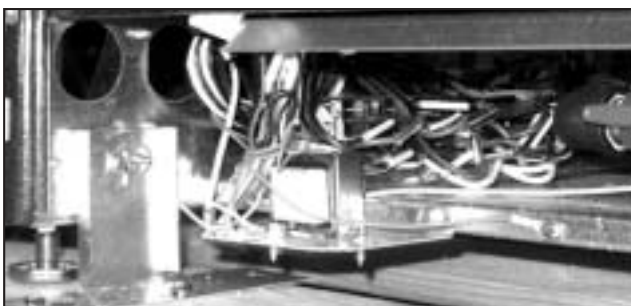


Fig. 30

4. Remove (2) 5/16" bolts holding the relay bracket. Slide the bracket forward out of the location tab on the backside, taking care not to damage wires (fig. 31).

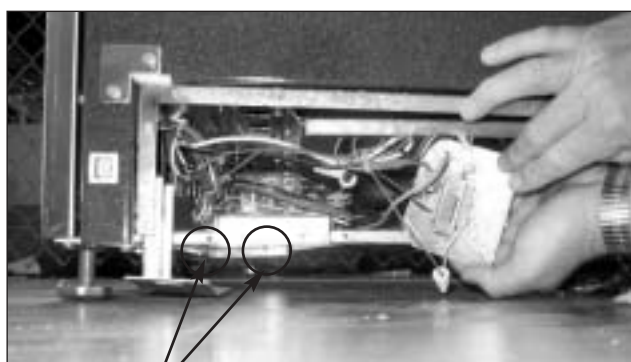


Fig. 31

Mounting
screws

PRELIMINARY

COMPONENT ACCESS

REGULATOR MANIFOLD ASSEMBLY

1. Pull oven away from wall, making sure gas and electrical supply is turned off at the valve, and gas line is disconnected.
2. Loosen and remove 15/16" brass flare nut from aluminum gas feed line at bottom, center of unit (fig. 32).

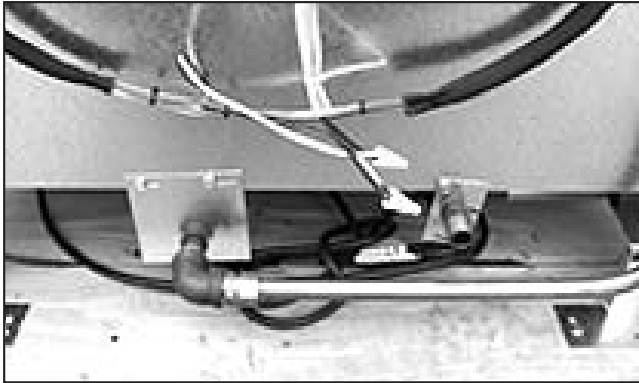


Fig. 32

3. Remove the three (3) 5/16" bolts holding pipe brackets to back of unit (fig. 32).
4. Remove the two (2) phillips head screws securing kick plate. Remove kickplate (fig. 23).
5. Remove the two (2) 5/16" bolts holding brackets on either side of the regulator (fig. 33).



Fig. 33

Bracket
Mounting
screws

6. Remove 5/8" brass flare nut at right hand side of "T", right side of regulator (fig. 34).
7. Pulling towards you, remove regulator manifold assembly.

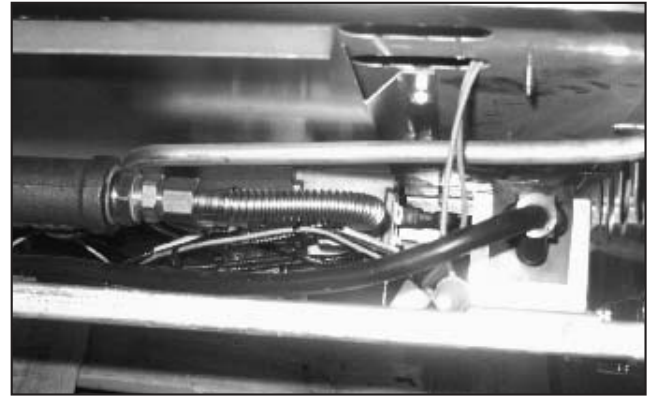


Fig. 34

MOTORIZED LATCH

1. Follow kick panel removal step (fig. 23) and disconnect power supply.
2. Remove the four (4) phillips head screws, holding latch bracket (fig. 35).



Fig. 35

3. Remove wires from switches and motor. Remove latch assembly.
4. Remove the four (4) screws of the access cover (fig. 36).



Fig. 36

5. Remove bracket.

COMPONENT ACCESS

BROILER ASSEMBLY/IGNITER REMOVAL



WARNING:

Disconnect circuit breaker and turn off the main gas valve prior to performing the following procedure...

1. Remove the three (3) phillips screws securing the wire cover panel located in the top of the oven door opening (fig. 37).



Fig. 37

2. Remove the four (4) black phillips screws securing the access cover (fig. 38).



Fig. 38

3. Remove the access cover, taking care not to disconnect or damage any wires or plugs connected to it (fig. 39).



Fig. 39

4. Carefully gather wires and direct them up through the slot located in the rear left corner of the cavity. This will allow access to the mounting screw located on the left front side panel. Also disconnect the two (2) wires from the high limit switch (fig. 40).



Fig. 40

5. Remove the two (2) ceramic wire nuts located on the left side of the opening, and disconnect the 2 wires (fig. 41).



Fig. 41

PRELIMINARY

COMPONENT ACCESS

6. Remove inner panel phillips screw (1) located on the left, front, side panel (fig. 42).

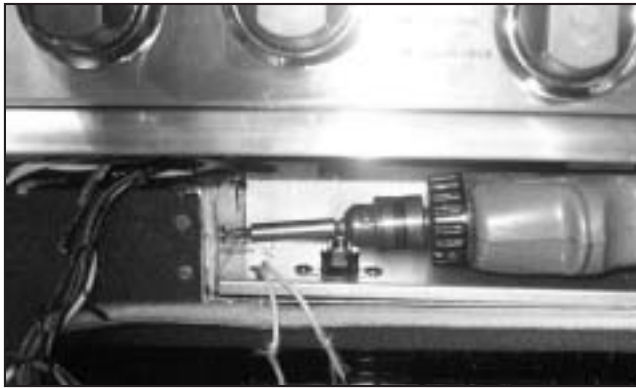


Fig. 42

7. Remove the phillips screws (2) securing the venturi cover located on the right side of the opening. Remove the cover (fig. 43).



Fig. 43

8. Remove the two (2) phillips screws and venturi shutters at the base of the burner tube (fig. 44).



Fig. 44

9. Remove the 5/16" hex head screw (1) located on the right side panel of the opening (fig. 45).

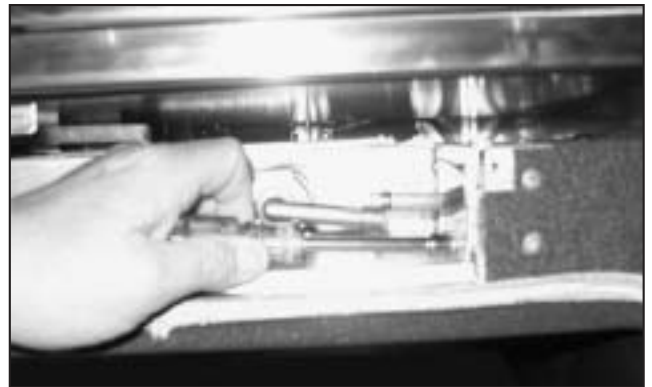


Fig. 45

10. Remove panel by tilting up and back while sliding panel out past broiler tube assembly.

11. Disconnect the gas line fitting. Temporarily secure the fitting nut to keep it from sliding down the tube into the range side wall cavity (fig. 46).



Fig. 46

12. Remove insulation taking care to note the exact location of the insulator for correct re-assembly (fig. 47).



Fig. 47

COMPONENT ACCESS

13. Remove the two phillips screws (2) securing the center bracket to the panel. Remove the bracket by lifting up and out. Remove the two (2) phillips screws located on the left and right side of the panel. Remove the panel by pulling out the left side and sliding the right side past the broiler tube (fig. 48).



Fig. 48

14. Remove insulation from panel. Again take note of it's exact location for correct re-assembly (fig. 49).



Fig. 49

15. Remove the panel by pulling it straight out (There are no screws or fasteners on this panel) (fig. 50).



Fig. 50

16. Remove the two (2) 5/16 " hex head screws securing the igniter assembly (fig. 51).



Fig. 51

17. Rotate the igniter assembly approximately 120 degrees counter clockwise and remove the igniter assembly. Remove the two wire nuts from the igniter, disconnect the wires and remove the igniter (fig. 52).



Fig. 52

18. Grasp the broiler assembly by it's tube and pull it straight out of the unit. To install the new broiler assembly or igniter reverse the dis-assembly procedure (fig. 53).



Fig. 53

PRELIMINARY

COMPONENT ACCESS



WARNING:

For safety reasons, it is essential that these insulating materials are reinstalled after servicing the unit in exactly the same locations from which they were removed. Failure to follow this warning will result in failure of the the unit to operate properly and could result in loss of property and/or serious injury to the user.

CONTROL PANEL REMOVAL

1. Follow kick panel removal (fig. 23) and disconnect power supply.
2. Remove the four (4) #15 torx head screws from control panel (fig. 54).



Fig. 54

3. Open door to the broil stop possession and cover with clean cloth (to protect door and control panel).
4. Remove knobs. Lay panel forward on door.
5. Disconnect wire to light switch and indicator.

SELECTION SWITCH

1. Follow kick panel removal (fig. 23) and disconnect power supply.
2. Remove the four (4) #15 torx head screws from control panel (fig. 54).
3. Open door to the broil stop possession and cover with clean cloth (to protect door and control panel).
4. Remove knobs. Lay panel forward on door.
5. Disconnect wire to light switch and indicator.

6. Remove selector switch mounting screws (fig. 61).
7. Remove selector switch and bracket.
8. Remove wires. Note wire location on switch.

BURNER RE-IGNITER

1. Follow kick panel removal (fig. 23) and disconnect power supply.
2. Remove the four (4) #15 torx head screws from control panel (fig. 54).
3. Open door to the broil stop possession and cover with clean cloth (to protect door and control panel).
4. Remove knobs. Lay panel forward on door.
5. Remove the selector switch and bracket.
6. Remove the two (2) phillips screws securing the re-igniter to the inner panel (fig. 55).

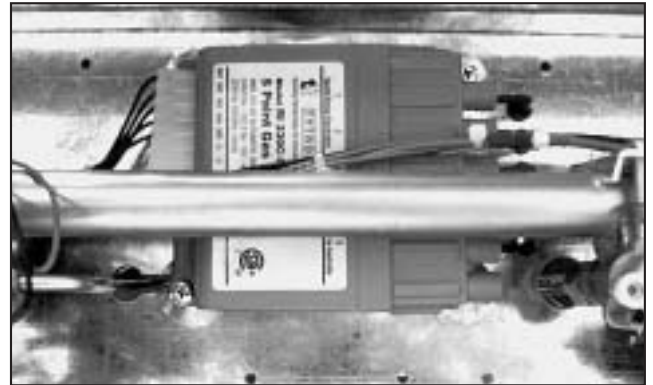


Fig. 55

7. Disconnect the Molex plug from the left side of the re-igniter.
8. Remove the five (5) igniter "plugs" from the right side of the re-igniter.
9. Taking care not to disturb other wires and connectors, remove the unit from behind the manifold tube.

TOP BURNERS

1. Remove burner grates
2. See sealed burner disassembly on page 17.

COMPONENT ACCESS

TOP ASSEMBLY

1. Pull oven away from wall, making sure gas supply is turned off at the valve, and gas line and electrical are disconnected.
2. Remove the four (4) phillips head screws from island trim where it attaches to the back panel (fig.56).



Fig. 56

3. Remove the all knobs and then the four (4) #15 torx head screws from control panel front (fig.54).
4. Remove upper burner assemblies and remove top from unit. (See page 17 burner disassembly).
5. Remove wire guard and trim assembly from front of unit. (fig's 57 & 58).



Fig. 57



Fig. 58

6. Remove the four (4) phillips head screws from bull nose trim assembly, two on either side (fig. 59).
7. Pull thermo bulbs from oven cavity

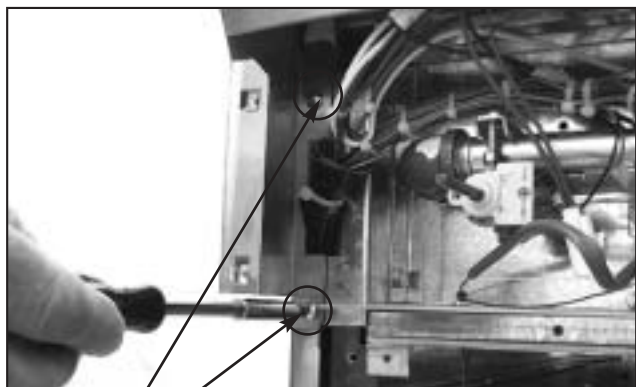


Fig. 59

4 phillips head screws

8. Lift top up to a 45 degree angle and pull straight towards you.

COOLING FAN MOTOR

1. Pull oven away from wall, making sure gas supply is turned off at the valve, and gas line and electrical are disconnected.
2. Remove the four (4) phillips head screws from island trim where it attaches to the back panel (fig.56).
3. Remove the four knobs and then the four (4) #15 torx head screws from control panel front (fig.54).
4. Remove upper burner assemblies and remove top from unit. (See page 17 burner disassembly).

PRELIMINARY

COMPONENT ACCESS

5. Remove wire guard and trim assembly from front of unit. (fig's 57 & 58).
6. Remove the four (4) phillips head screws from bull nose trim assembly, two on either side (fig. 59).
7. Pull thermo bulbs from oven cavity
8. Lift top up to a 45 degree angle and pull straight towards you.
9. Remove the nine (9) 5/16" bolts, holding motor bracket, located on the inside of the burner box assembly (fig. 60).

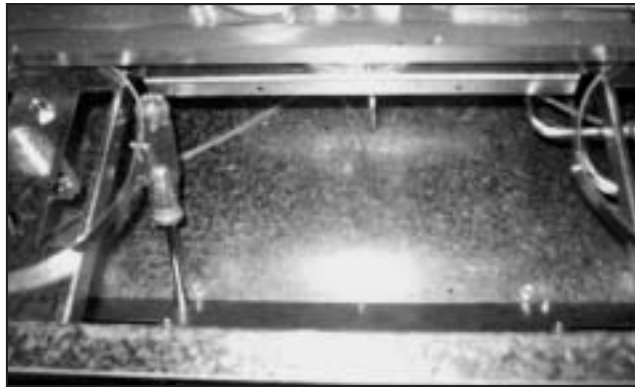


Fig. 60

10. Remove wires and remove assembly.
11. Remove the three (3) phillips head screws and two nuts and bolts. Remove motor from bracket.

OVEN THERMOSTAT

1. Follow kick panel removal (fig. 23) and disconnect power supply.
2. Remove the four (4) #15 torx head screws from control panel (fig. 54).
3. Open door to the broil stop possession and cover with clean cloth (to protect door and control panel).
4. Remove knobs. Lay panel forward on door.
5. Disconnect wire to light switch and indicator.
6. Remove selector switch mounting screws (fig. 61).

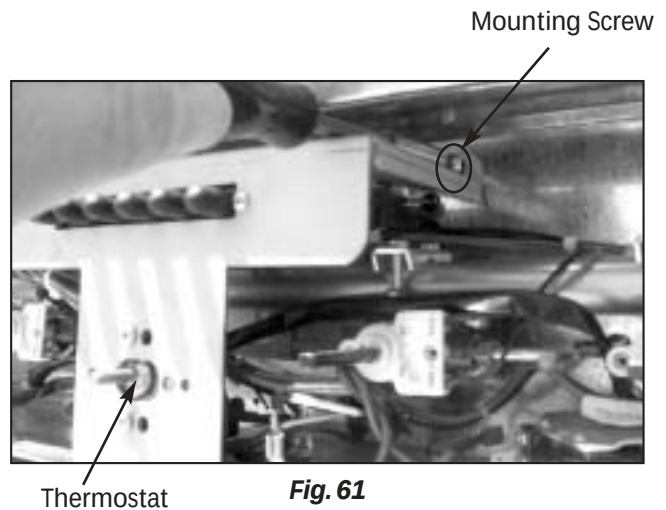


Fig. 61

7. Remove selector switch and bracket.
8. Remove wires. Note wire location on switch (fig. 62).

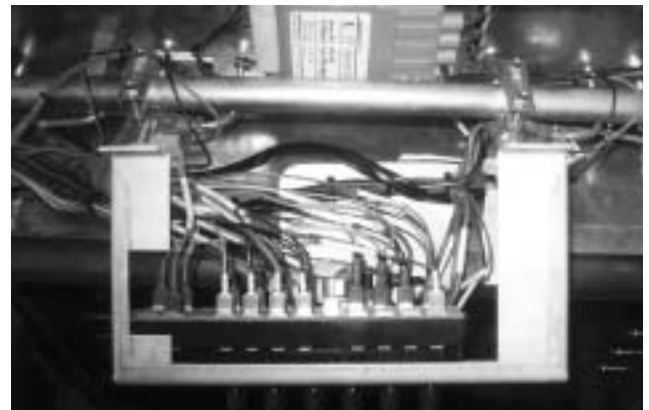


Fig. 62

9. Remove thermostat-mounting screws (fig. 61).
10. Remove wire guard and trim assembly from front of unit (fig. 57 and 58).
11. Remove capillary bulb from holder inside oven cavity.
12. Feed capillary bulb up through hole in oven cavity and back through panel (fig. 63 and 64).

COMPONENT ACCESS

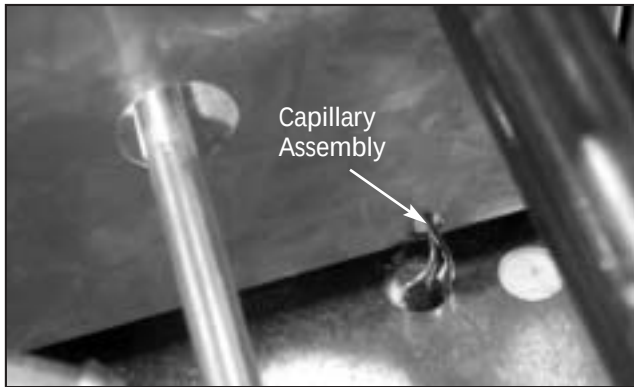


Fig. 63



Fig. 64

LOCK THERMOSTAT

1. Follow kick panel removal (fig. 23) and disconnect power supply.
2. Remove the four (4) #15 torx head screws from control panel (fig. 54).
3. Open door to the broil stop possession and cover with clean cloth (to protect door and control panel).
4. Remove knobs. Lay panel forward on door.
5. Disconnect wire to light switch and indicator.
6. Remove selector switch mounting screws (fig. 61).
7. Remove selector switch and bracket.
8. Remove thermostat-mounting screws (fig. 61).
9. Remove wire guard and trim assembly from front of unit (fig. 57 and 58).
10. Remove capillary bulb from holder inside oven cavity.
11. Feed capillary bulb up through hole in oven cavity and back through panel (fig. 63 and 64).
12. Unscrew thermostat from bottom of control panel.

CLEAN THERMOSTAT

1. Disconnect power supply.
2. Remove the four (4) #15 torx head screws from control panel (fig. 54).
3. Remove selector switch mounting screws (fig. 61).
4. Remove clean thermostat mounting screw (fig. 65).
5. Remove wires from clean thermostat.
6. Carefully remove thermostat assembly from inner panel.

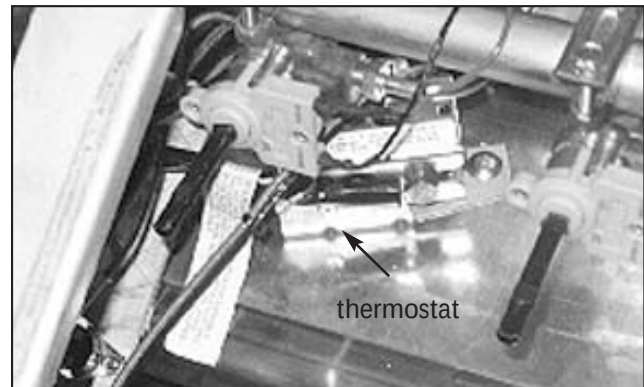


Fig. 65

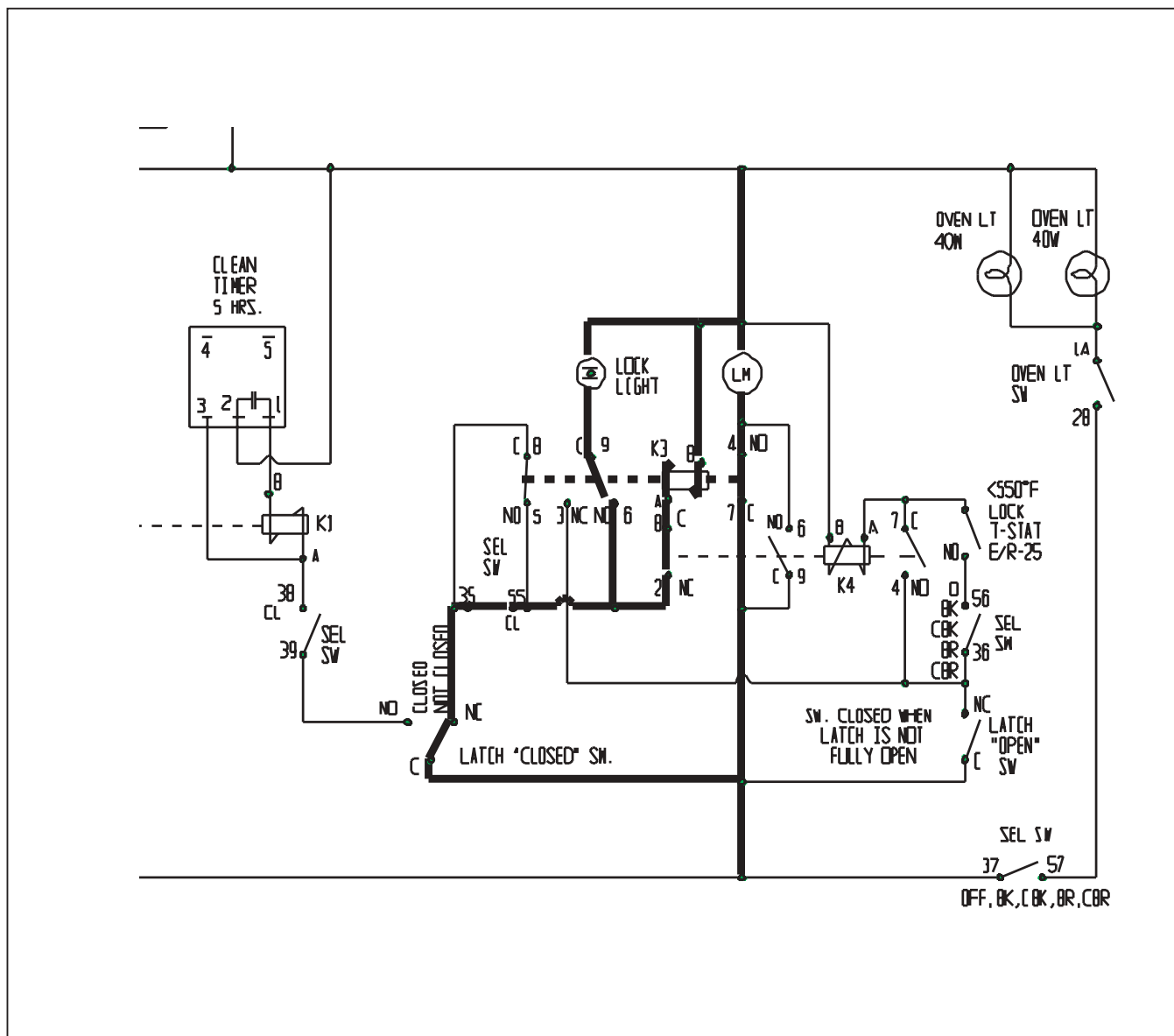
PRELIMINARY

TROUBLESHOOTING

CONDITION	CHECK
No Bake	☐ Bake igniter 3.0 amp to 3.3 amp draw ATC continuity ☐ Oven T-Stat contacts ☐ Main gas valve “OFF” ☐ Selector switch contacts 30 – 33: 40 – 43 ☐ Dual safety valve continuity
No Broil	☐ Broil igniter 3.0 amp to 3.3 amp draw HTC continuity ☐ Oven T –Stat contacts ☐ Main gas valve “OFF” ☐ Selector switch contacts (3-31;30-34;56-36;57-37;40-42) ☐ Dual safety valve continuity
No Clean	☐ See “Clean Relay Section” ☐ See motorized latch ☐ See above
Not Locking and Un-Locking	☐ See motorized latch ☐ See “Clean Relay Section”
Burners Not Lighting	☐ Check supply voltage 120 VAC ☐ Check for spark at burner ☐ Igniter dirty ☐ Check igniter switches
Cooking Complaints	☐ Check igniter module ☐ Check operating gas pressure ☐ See “Cooking Section”

CLEAN RELAY LOCKING

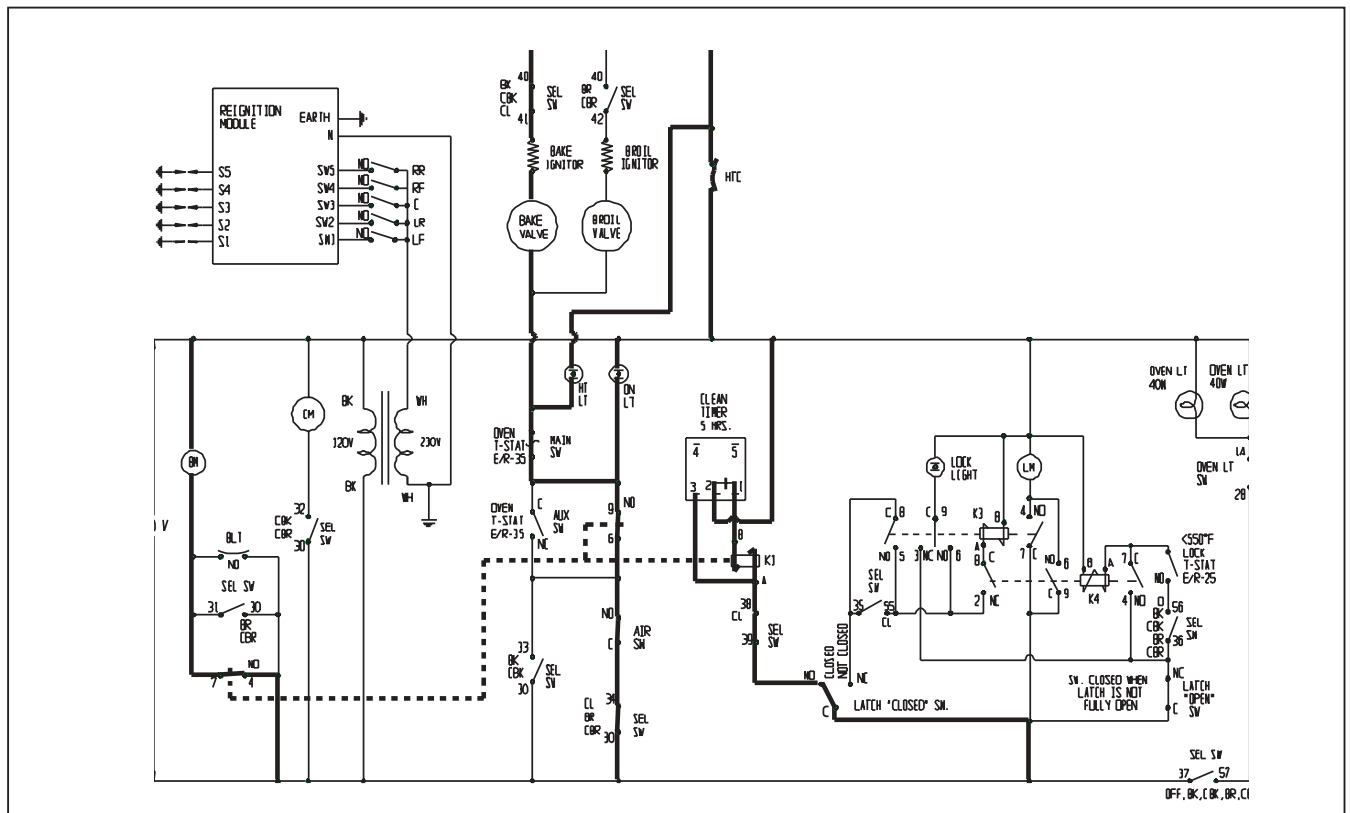
COMPONENT	CLOSED CONTACTS
1) "Latch close switch"	C - NC
2) "Selector switch"	35 - 55
3) "K4 Relay"	8 - 2
4) "K3 Relay" coil energized	N/A
5) "K3 Relay"	4 - 7
6) Lock Motor energized	N/A



PRELIMINARY

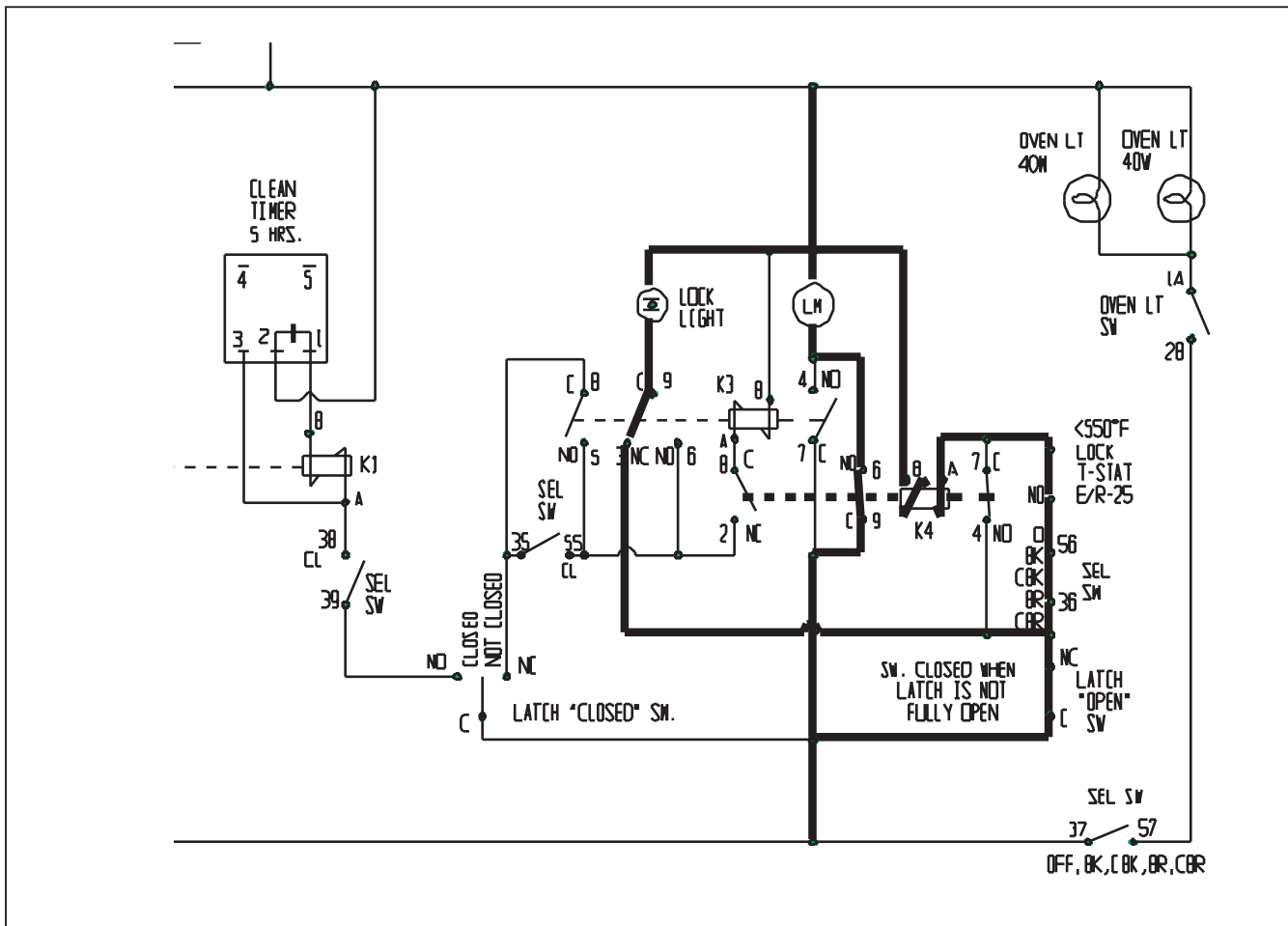
CLEAN RELAY HEATING (LOCKED)

COMPONENT	CLOSED CONTACTS
1) "Latch close switch"	C - NO
2) "Selector switch"	39 - 38
3) "Clean timer"	1 - 2
4) "K1 Relay" coil energized	N/A
4a) "Blower motor" energized (K1)	4 - 7
4b) "Air switch" closes,	
5) "Selector switch"	34 - 30
6) "K1 Relay"	9 - 6
7) "Oven T-Stat" Micro switch contacts	N/A
8) "Bake valve" energized	N/A
9) "Bake igniter" energized	N/A
10) " Selector switch"	40 - 41
11) "High-Temp cut-out"	N/A



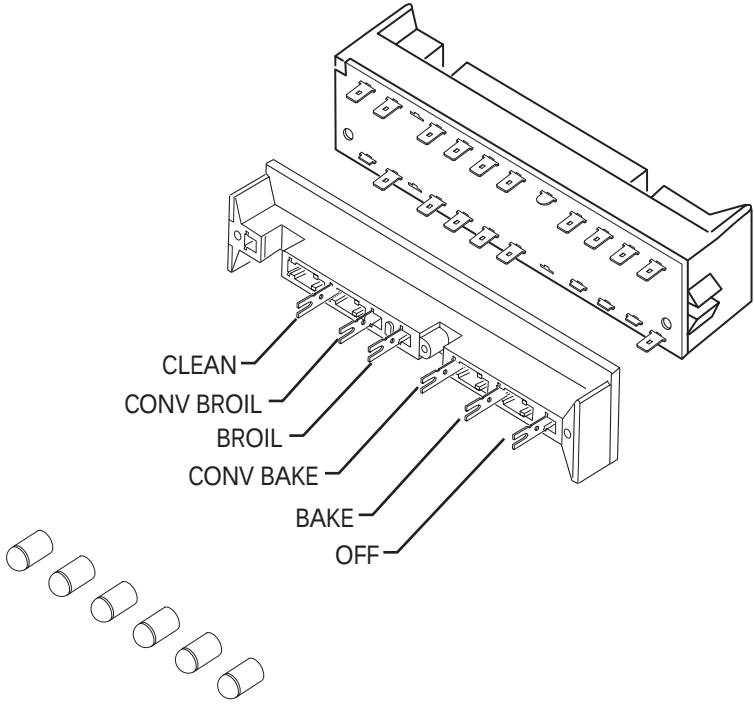
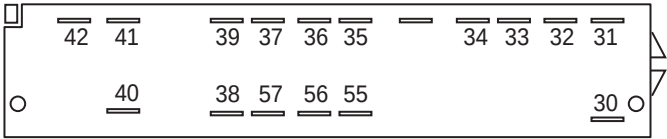
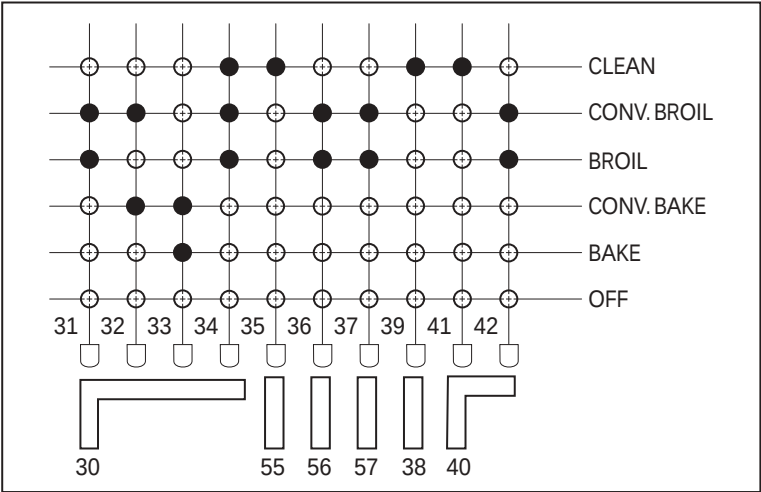
CLEAN RELAY UNLOCKING

COMPONENT	CLOSED CONTACTS
1) "Selector switch" "Off" pos.	N/A
2) "Oven temperature less than 550°F	N/A
3) "Latch open switch"	C – NC
4) "Selector switch"	36 - 56
5) "Lock T-Stat"	C – NO
6) "K4 Relay" coil, energized	N/A
6a) "K4 Relay"	9 - 6
6b) "Latch motor", energized	N/A



PRELIMINARY

PUSH BUTTON SWITCH



OVEN AND BROILER IGNITER

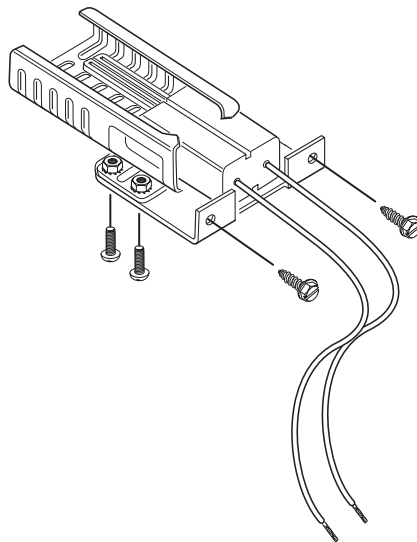
Both the bake and broil burners use a hot surface ignition system. The safety valve operates by current, not voltage. The igniter resistance decreases, allowing more current to flow to the safety valve, as the surface temperature increases.

From a cold start it can take as long as 60 seconds, with voltage applied, to reduce the resistance sufficiently to

provide a minimum of 2.9 amps of current flow in the series circuit. The igniter should provide a current flow of between 3.2 and 3.7 amps. At this point the igniter temperature is between 1800 and 2500 degrees F. The igniter will remain energized as long as the thermostat is "calling for heat". If the igniter glows red and does not draw at least 3.0 amps, the fault is probably in the igniter, not the safety valve.

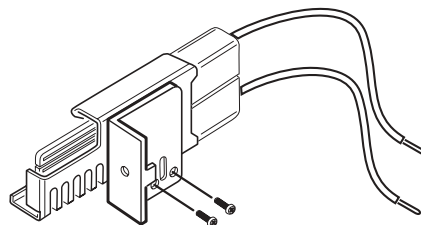
BROIL IGNITER

(p/n 16009-1)



OVEN IGNITER

(p/n 16505)



PRELIMINARY

SERVICE BULLETIN

FOOT KIT REPAIR – K-14355

<u>Parts</u>	<u>Part Number</u>
Rubber feet (12)	14355
Syringe/adhesive (1)	25301
Drywall screw 6 x 2-1/4 (1)	15103



- 1.** Remove the bumper cap.
Note: the rubber foot may be broken or missing.



- 2.** Use a dry wall screw to extract the remaining bumper material from the grate hole (s).



- 3.** Rotate the screw clockwise to extract the old bumper stem.



- 4.** Take the cap off the syringe by unscrewing it.



- 5.** Apply a small amount of the adhesive in the grate hole. Press the new bumper (s) into each of the grate holes while slightly twisting.

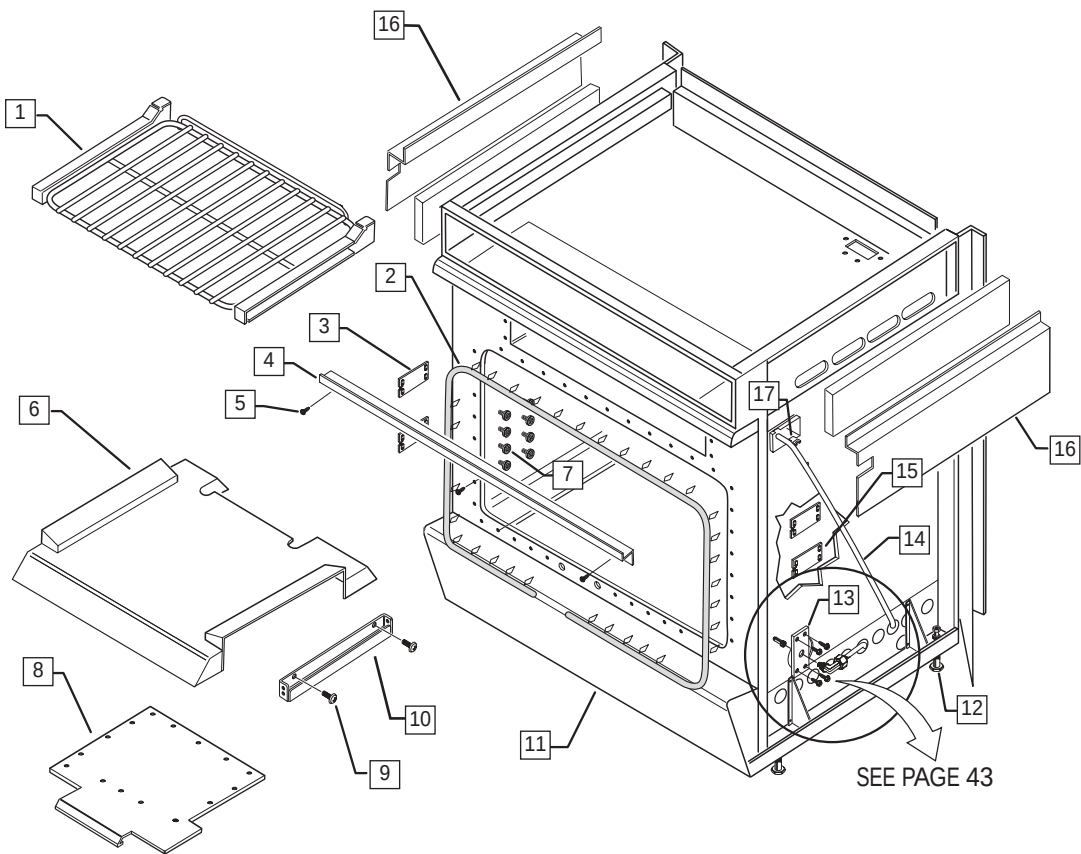


- 6.** Verify that the bumper (s) are fully seated in their respective holes.

RANGE BODY ASSEMBLY

ITEM	PART NO.	DESCRIPTION
1	91658	RACK, OVEN (3 PLCS)
2	14052	30" OVEN GASKET
3	91657-02	WLDMT RLR SUPT LH (2 PLCS)
4	91944	WIRE GUARD COVER
5	15001-09	SCREW (3 PLCS)
6	91494-PC	OVEN BOTTOM
7	14197-02	ROLLER, RACK
8	91499	PLATE, FLAME SPREADER
9	15001-23	SCREW, MACHINE (2 PLCS)
10	91709	BRACKET, BULBS

ITEM	PART NO.	DESCRIPTION
11	91682	KICK PLATE, SILVER
	91682-01-PA	KICK PLATE, WHITE
	91682-02-PA	KICK PLATE, BLACK
12	18052-2	LEVEL LEG (AFTER TEST)
13	91712	BRACKET SUPPORT, VENTURI
14	91722	PIPE BROILER
15	91657-01	WLDMT RLR SUPT R/H (2 PLCS)
16	91704-01	SIDE SHIELD R/H
	91704-02	SIDE SHIELD L/H
17	16071	GROMMET, WHITE

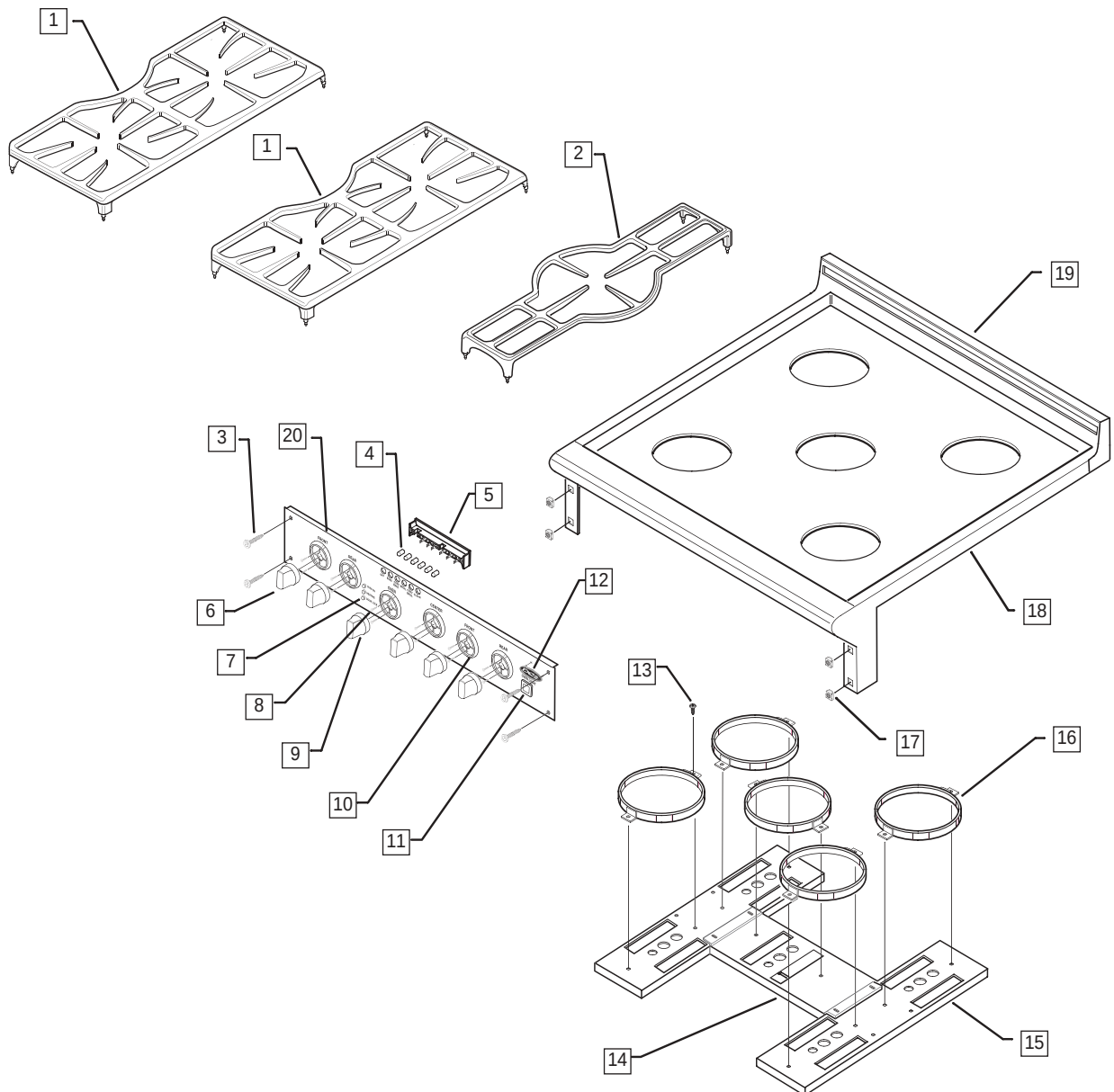


PRELIMINARY

RANGE TOP ASSEMBLY

ITEM	PART NO.	DESCRIPTION
1	12261-01	SIDE GRATE (R/L)
2	12262-01	CENTER GRATE
3	15002-41	SCREW, TORX (#15) (4 PLCS)
4	14051-01	BUTTON, BLACK (6 PLCS)
5	16399	SWITCH, PUSH BUTTON
6	14307	KNOB, BLACK (5 PLCS)
7	16046-02	LENS, LIGHT PILOT (3 PLCS)
8	15001-29	SCREW, BEZEL (12 PLCS)
9	14306	KNOB, BLACK THERMOSTAT
10	14006-PL	BEZEL, PLATED (6 PLCS)

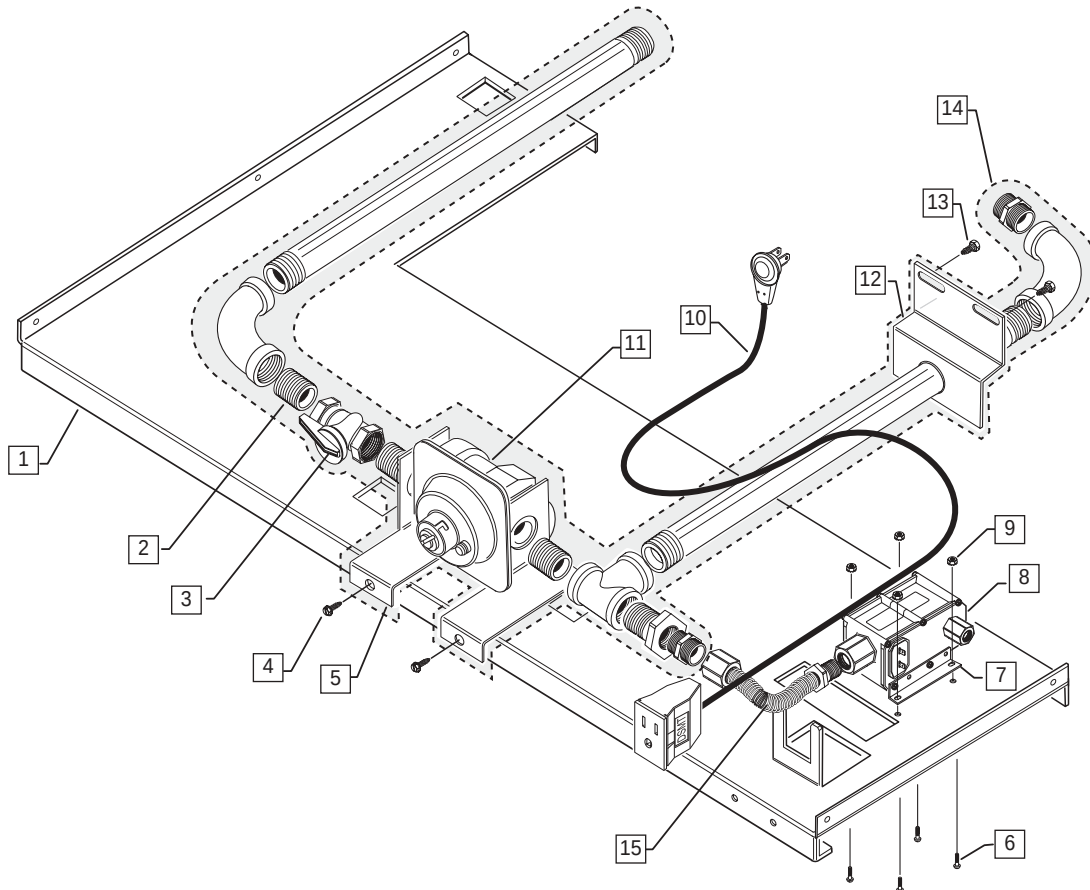
ITEM	PART NO.	DESCRIPTION
11	16127	SWITCH, OVEN LIGHT
12	15073	LOGO, DCS
13	15001-19	SCREW (10 PLCS)
14	91228	CTR HANGER BURNER
15	91227	HANGER, BURNER (R/L)
16	91727	SUPPORT, COOKTOP (5 PLCS)
17	15029-02	NUT, CAGED (4 PLCS)
18	91782	COOKTOP WLD ASSY, INNER
19	91678	ISLAND TRIM WLD ASSY
20	91224-PA	VALVE PANEL ASSY



SAFETY VALVE ASSEMBLY

ITEM	PART NO.	DESCRIPTION
1	91502	SUPPORT, GAS TRAIN
2	18018-1	NIPPLE 1/2 NPT
3	18044	VALVE, SHUT OFF
4	15001-19	SCREW (2 PLCS)
5	91501	BRKT, MOUNT (2 PLCS)
6	15001-19	SCREW (2 PLCS)
7	91851	BRACKET (2 PLCS)

ITEM	PART NO.	DESCRIPTION
8	13053	VALVE, SAFETY
9	15021-04	NUT
10	16430	CORD, POWER
11	13003	REGULATOR
12	91964	BRACKET
13	15001-19	SCREW (2 PLCS)
14	91938	GAS TRAIN ASSY
15	18379	TUBE, FITTING ASSY

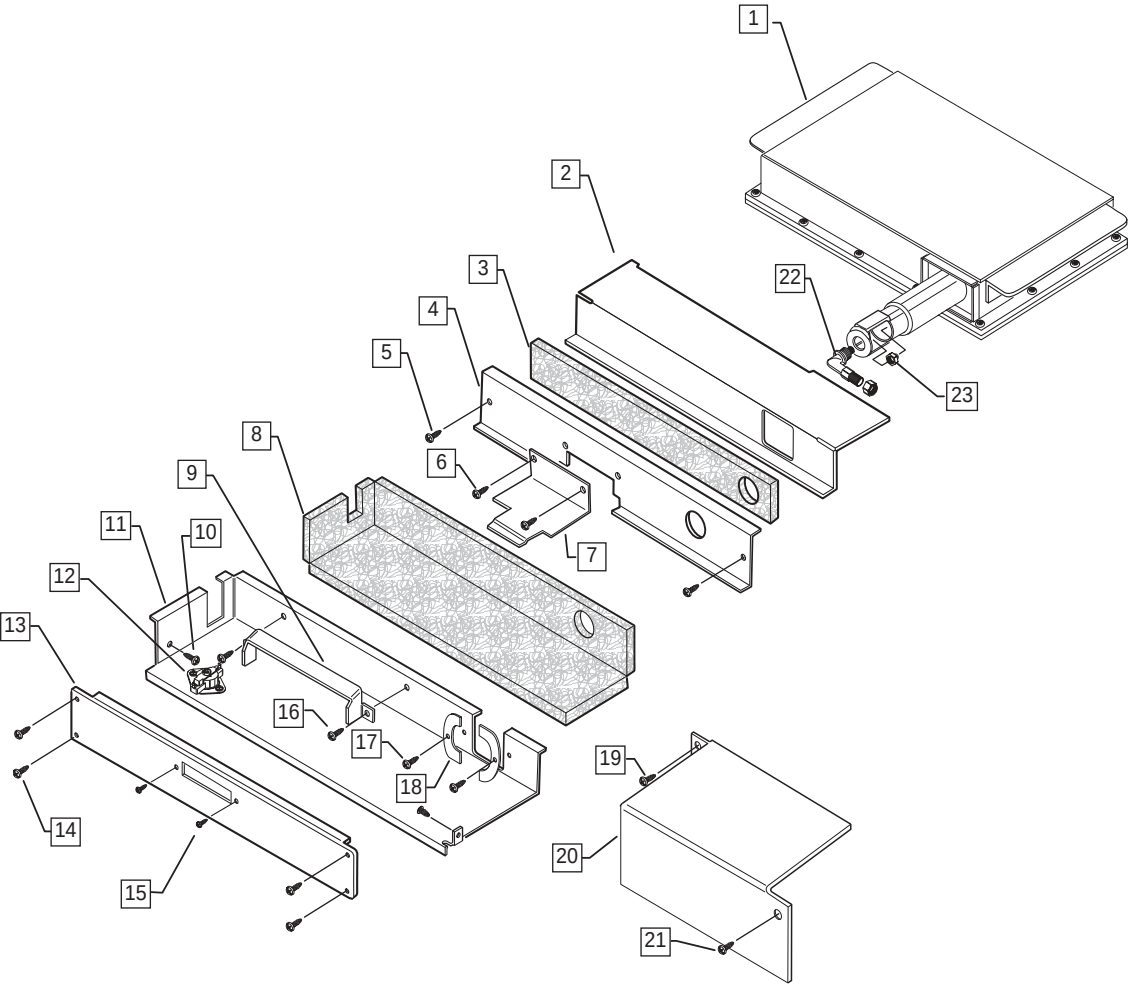


PRELIMINARY

INFRARED BROILER ASSEMBLY

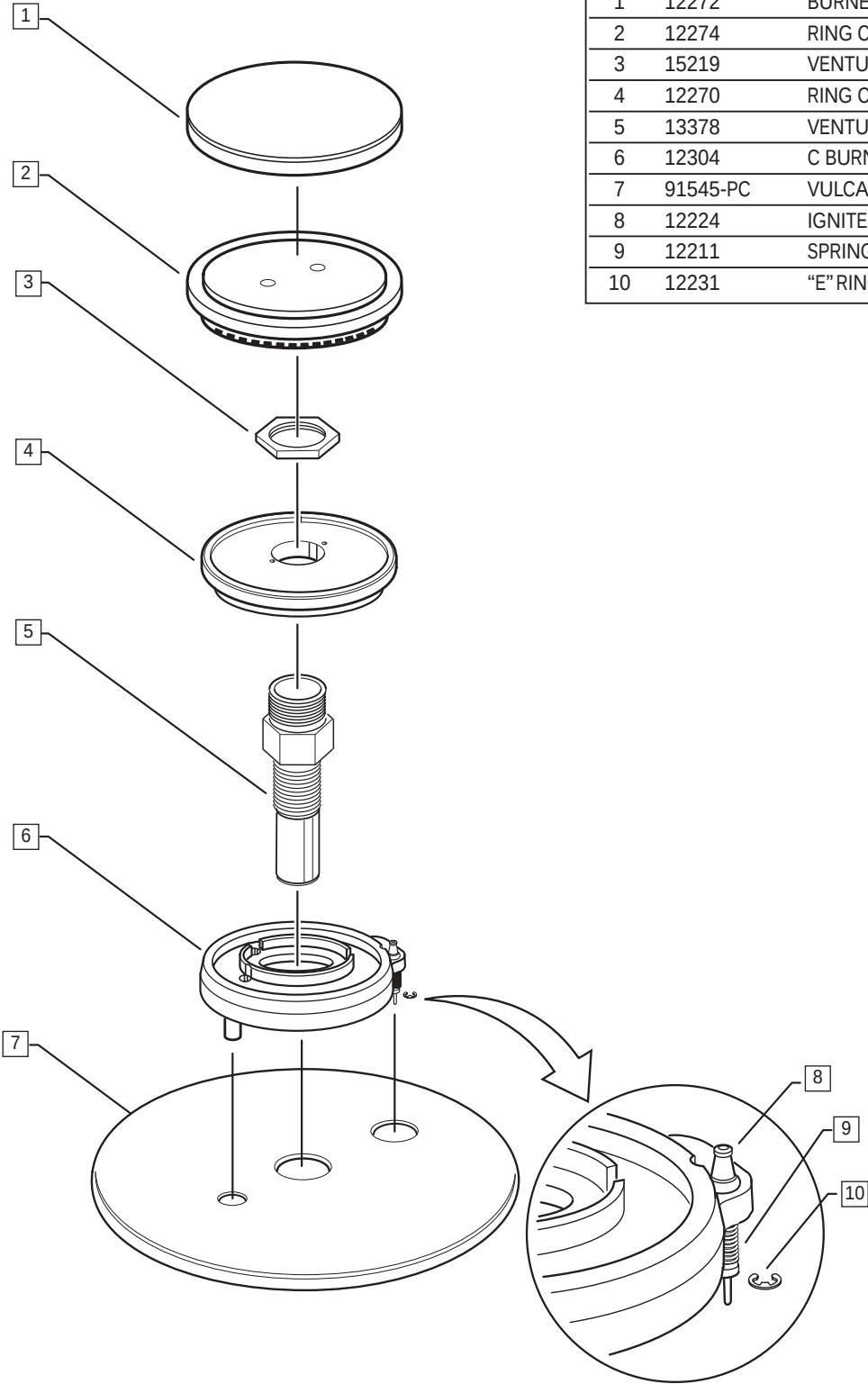
ITEM	PART NUMBER	DESCRIPTION
1	91242	IR BURNER ASSEMBLY
2	91708	SPACER, AIR BROILER
3	91728-01	INSULATION
4	91245	PLATE, FRONT INSULATION BOX
5	15001-03	SCREW
6	15001-03	SCREW
7	91471	BRACKET, BROILER IGNITER
8	91730-02	INSULATION PANEL
9	91701	DEFLECTOR, LOCK MOTOR
10	15001-03	SCREW
11	91706	SHIELD, BROILER FRONT
12	13043	HI-TEMP CUTOUT

ITEM	PART NUMBER	DESCRIPTION
13	91195-PC	ACCESS PANEL
14	15001-14	SCREW
15	15001-09	SCREW
16	15001-03	SCREW
17	15001-03	SCREW
18	15001-03	SCREW
19	15001-05	SCREW
20	91481	LOCK BOX, INNER WALL
21	15001-03	SCREW
22	18020-1	FITTING ELBOW
23	18077-2	FERRULE



PRELIMINARY

SEALED BURNER ASSEMBLY



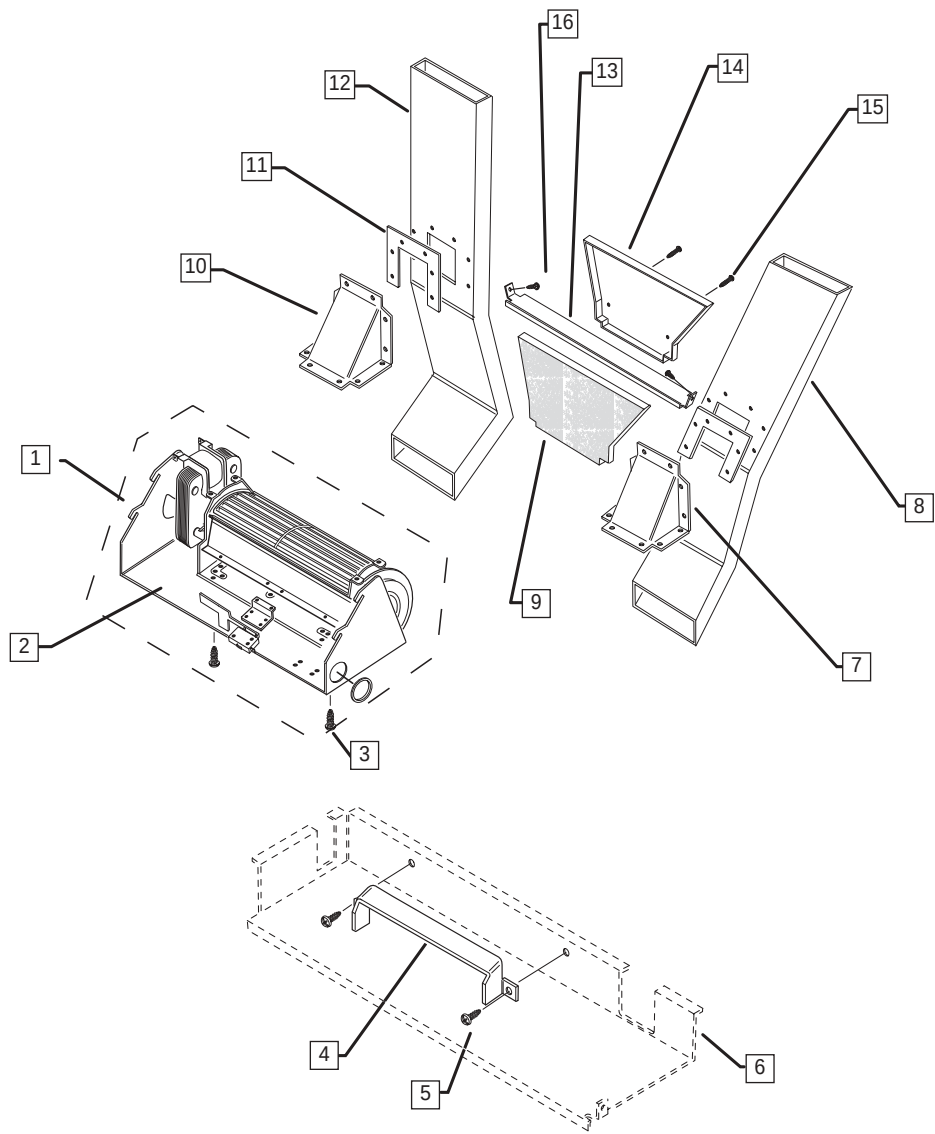
ITEM	PART NO.	DESCRIPTION
1	12272	BURNER CAP
2	12274	RING C PORT
3	15219	VENTURI NUT
4	12270	RING C SIMMER
5	13378	VENTURI
6	12304	C BURNER BASE
7	91545-PC	VULCANO
8	12224	IGNITER
9	12211	SPRING
10	12231	"E" RING

PRELIMINARY

COOLING COMPONENTS ASSEMBLY

ITEM	PART NO.	DESCRIPTION
1	91659	COOLING FAN ASSEMBLY
2	91212	BLOWER MOTOR MOUNT
3	15001-12	SCREW (2 PLCS)
4	91701	DEFLECTOR
5	15001-05	SCREW (2 PLCS)
6	91706	SHIELD, BROILER FRONT
7	91707-02	SHIELD EXHAUST TOP (LEFT)
8	91520-02	FLUE VENT L/H

ITEM	PART NO.	DESCRIPTION
9	91728-02	INSULATION, REAR PANEL
10	91707-01	SHIELD EXHAUST TOP (RIGHT)
11	91730-05	GASKET (2 PLCS)
12	91520-01	FLUE VENT R/H
13	91696	BACK SHIELD </td
14	91693	RETAINER, INSULATION
15	15001-32	SCREW (2 PLCS)
16	15001-32	SCREW (2 PLCS)

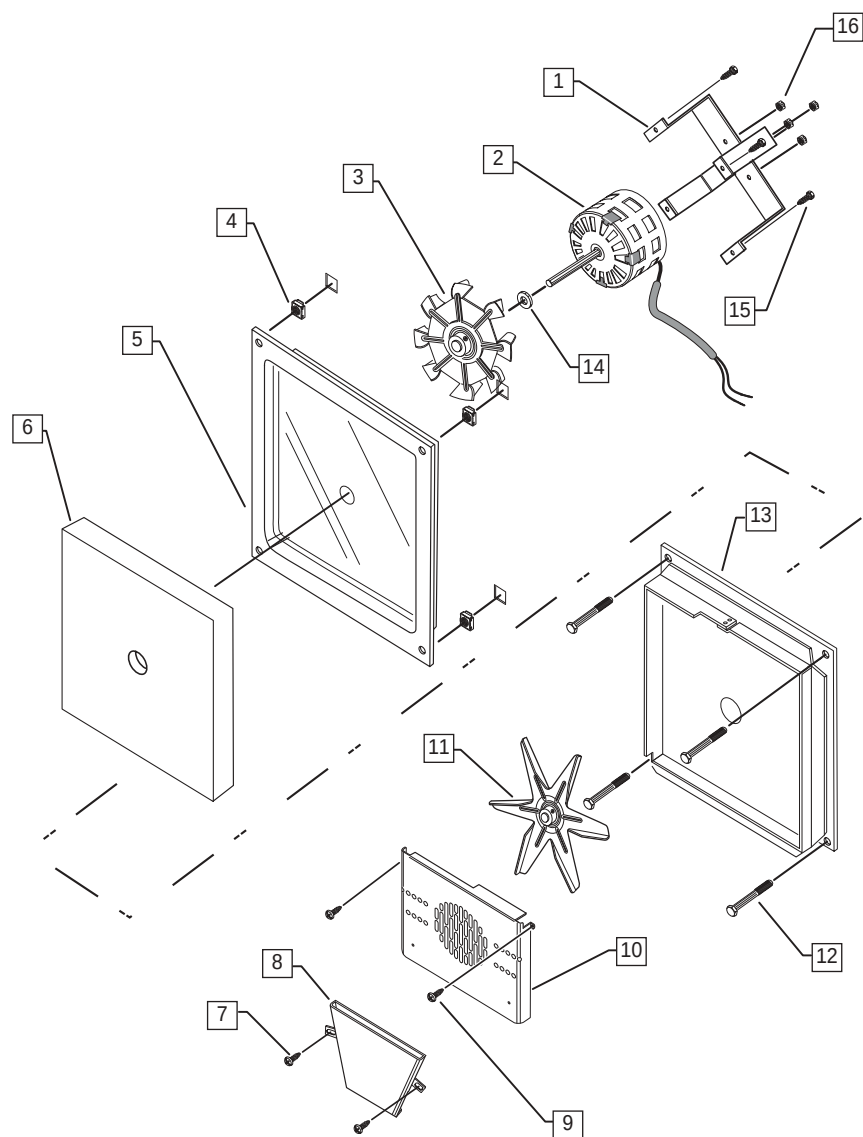


PRELIMINARY

CONVECTION ASSEMBLY

ITEM	PART NO.	DESCRIPTION
1	90276	MOTOR SUPPORT BRACKET
2	16327	CONVECTION FAN MOTOR
3	16053	MOTOR COOLING BLADE
4	15029-02	CAGED NUT
5	91700	WLDMT, INSUL MOTOR COVER
6	90170	PAD INSULATION, MOTOR
7	15001-32	SCREW (2 PLCS)
8	91218-PC	OVEN DAMPER

ITEM	PART NO.	DESCRIPTION
9	15001-32	SCREW (2 PLCS)
10	91214-PC	BAFFLE, OVEN
11	16130	CONVECTION BLADE
12	15003-24	BOLT (4 PLCS)
13	90171	INNER WLDMT MOTOR CVR.
14	15005-28	WASHER
15	15001-19	SCREW (4 PLCS)
16	15004-10	NUT, NYLOK (4 PLCS)

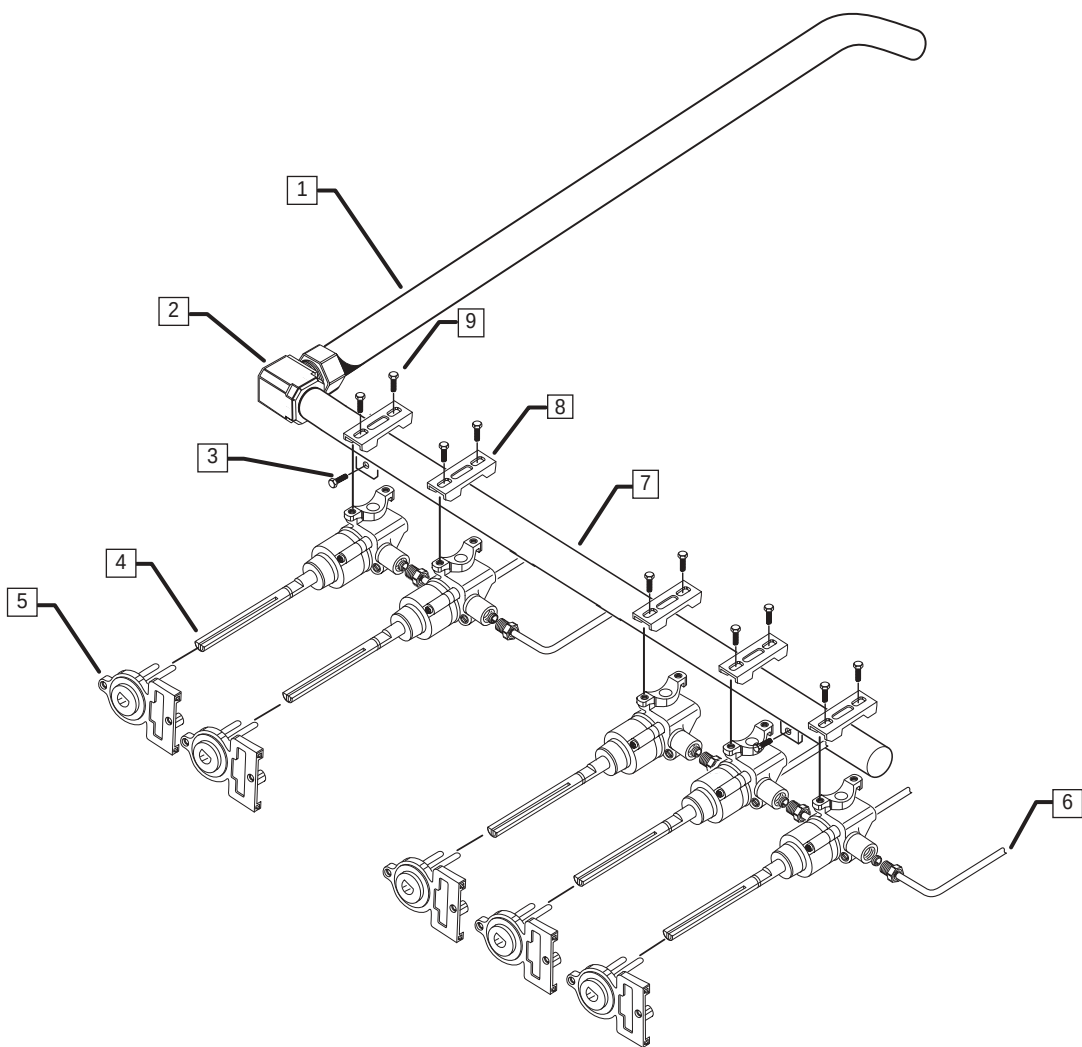


PRELIMINARY

MANIFOLD/VALVES ASSEMBLY

ITEM	PART NO.	DESCRIPTION
1	91724	TUBE (GAS)
2	18480	ELBOW 90° 1/2 NPT TO 5/8 TUBE
3	15021-08	NUT (2 PLCS)
4	13390-06	GAS VALVE, NAT
	13390-08	GAS VALVE, LP

ITEM	PART NO.	DESCRIPTION
5	16415	SWITCH, IGNITER (5 PLCS)
6	11252	3/16" TUBE ASSY SIMMER REAR
7	18323	MANIFOLD
8	12177	CLAMP, VALVE
9	15003-33	BOLT (10 PLCS)

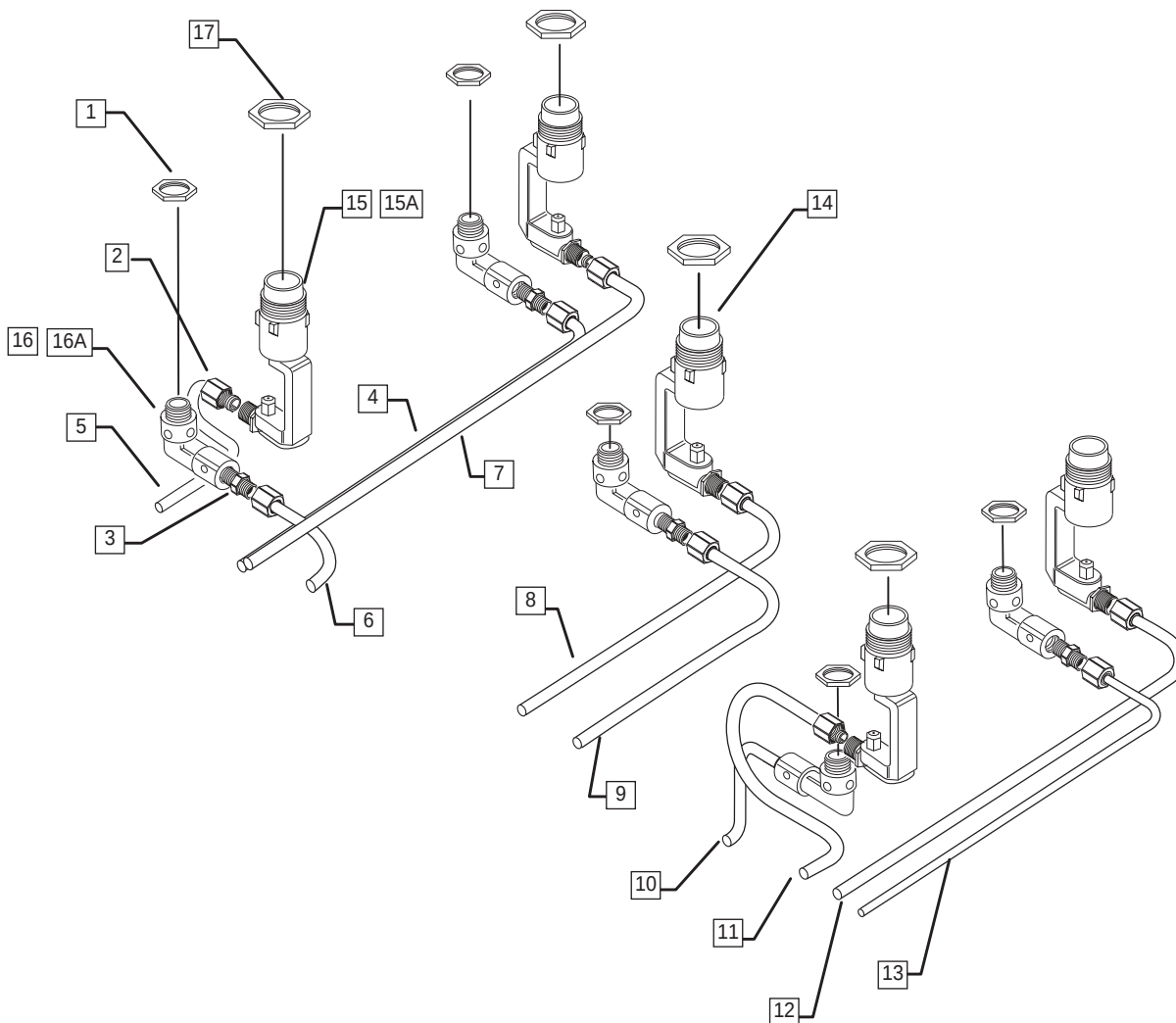


PRELIMINARY

GAS JET ASSEMBLIES

ITEM	PART NO.	DESCRIPTION
1	15219	NUT, VENTURI (5 PLCS)
2	18077-1	NUT, COMPRESSION (MAIN)(5)
3	18284	B-NUT 3/16" (SIMMER)(5 PLCS)
4	11252	TUBE SIMMER (LEFT REAR)
5	11247	TUBE, MAIN (LEFT FRONT)
6	11251	TUBE SIMMER (LEFT FRONT)
7	11248	TUBE, MAIN (LEFT REAR)
8	11249	TUBE, MAIN (CENTER)
9	11253	TUBE SIMMER (CENTER)

ITEM	PART NO.	DESCRIPTION
10	11251	TUBE SIMMER (RIGHT FRONT)
11	11247	TUBE, MAIN (RIGHT FRONT)
12	11248	TUBE, MAIN (RIGHT REAR)
13	11252	TUBE SIMMER (RIGHT REAR)
14	12200-09	JET HLDR, MAIN (NAT)(CTR)
15	12200-10	JET HLDR, MAIN (NAT)(4 PLCS)
15A	12254-04	JET HLDR, MAIN (LP)(5 PLCS)
16	12254-05	JET HLDR, SIMMER (NAT)(5 PLCS)
16A	12254-04	JET HLDR, SIMMER (LP)(5 PLCS)
17	15236	NUT, W/CHAMFER

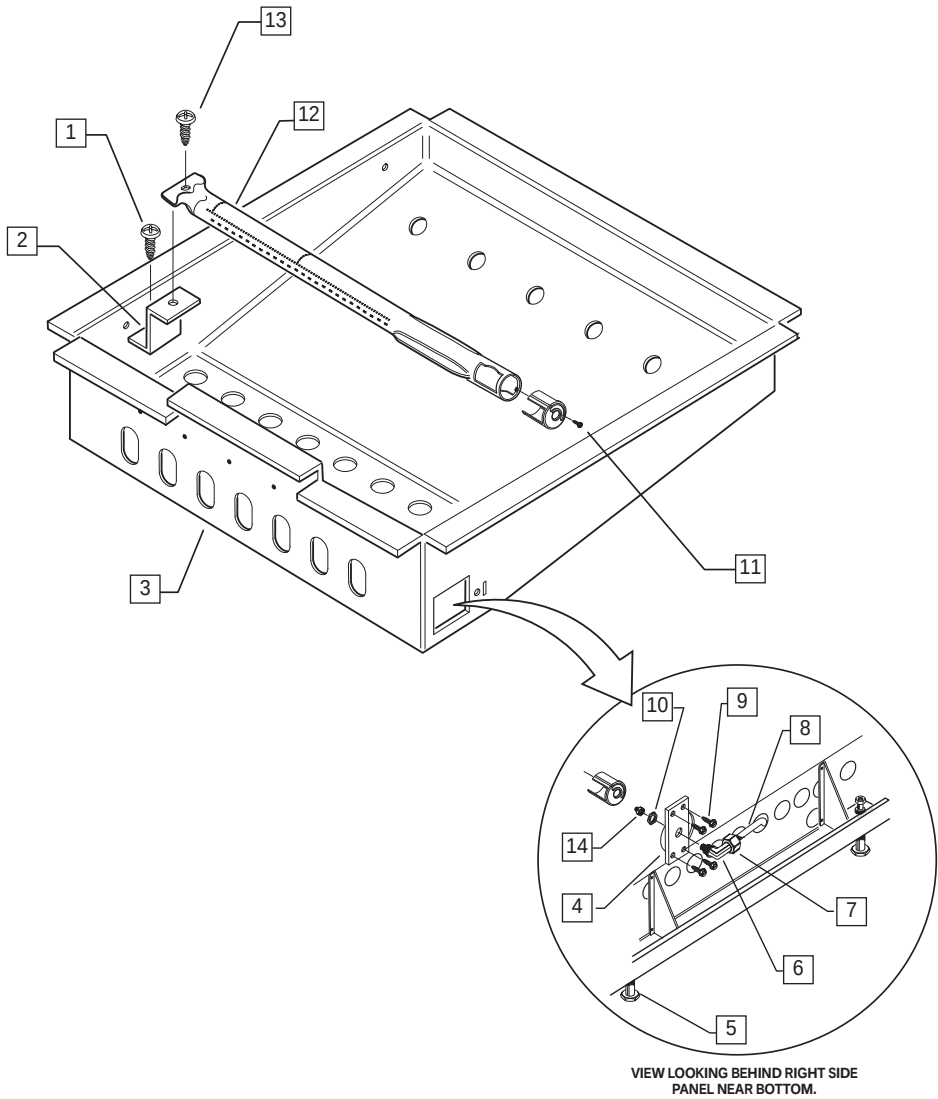


PRELIMINARY

OVEN BURNER ASSEMBLY

ITEM	PART NO.	DESCRIPTION
1	15001-09	SCREW
2	91757	BRACKET, BURNER
3	91937	BURNER BOX
4	91712	BRACKET
5	18052-2	ADJUSTABLE LEG
6	18376-01	90° ELBOW ORIFICE HOLDER ASSY-NAT
	18376-02	90° ELBOW ORIFICE HOLDER ASSY-LP
7	18077-1	COMPRESSION NUT

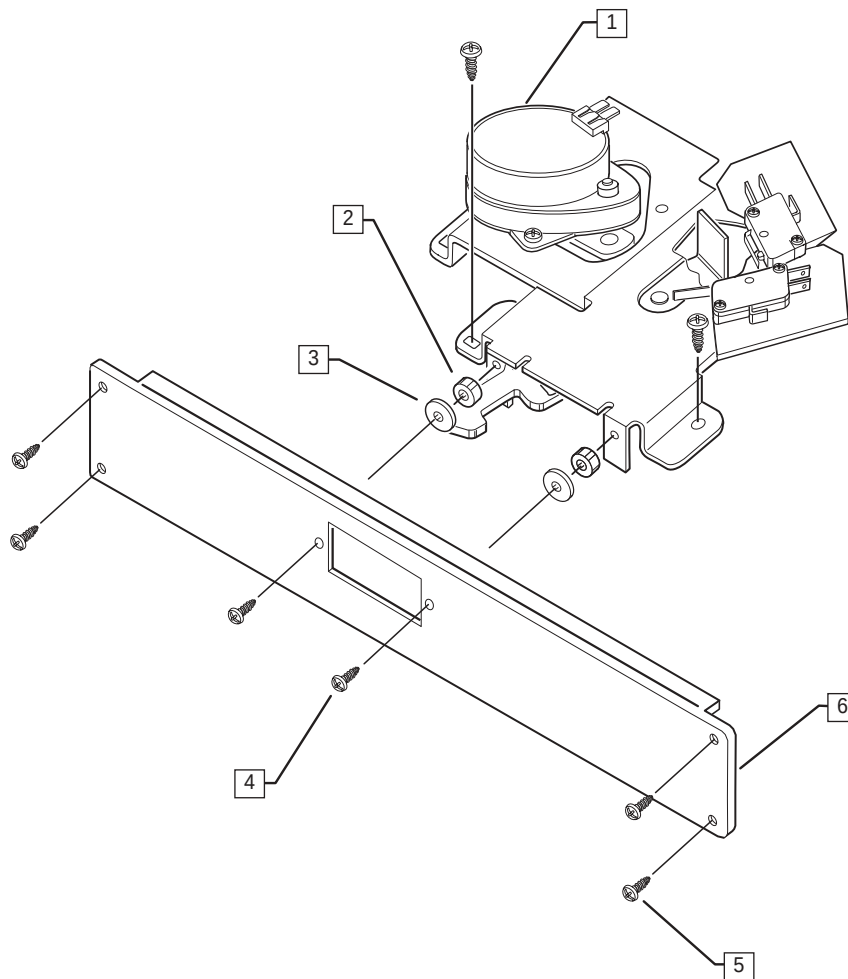
ITEM	PART NO.	DESCRIPTION
8	91723	TUBE BAKE
9	15001-27	SCREW (4 PLCS)
10	15071	NUT, STAMPED PAL NUT REPLACEMENT PART
11	15001-09	SCREW
12	12275	BURNER/AIR SHUTTER, OVEN
13	15001-27	SCREW
14	13005-40	ORIFICE (NAT)
	13005-53	ORIFICE (LP)



PRELIMINARY

MOTORIZED LATCH ASSEMBLY

ITEM	PART NO.	DESCRIPTION
1	16247	LATCH ASSEMBLY
2	15075-01	SPACER (2 PLCS)(.25 IN.)
3	15005-21	WASHER,MICA (2PLCS)
4	15001-09	SCREW, BLK (2 PLCS)
5	15001-14	SCREW (2 PLCS)
6	91195-PC	ACCESS PANEL, PORC.

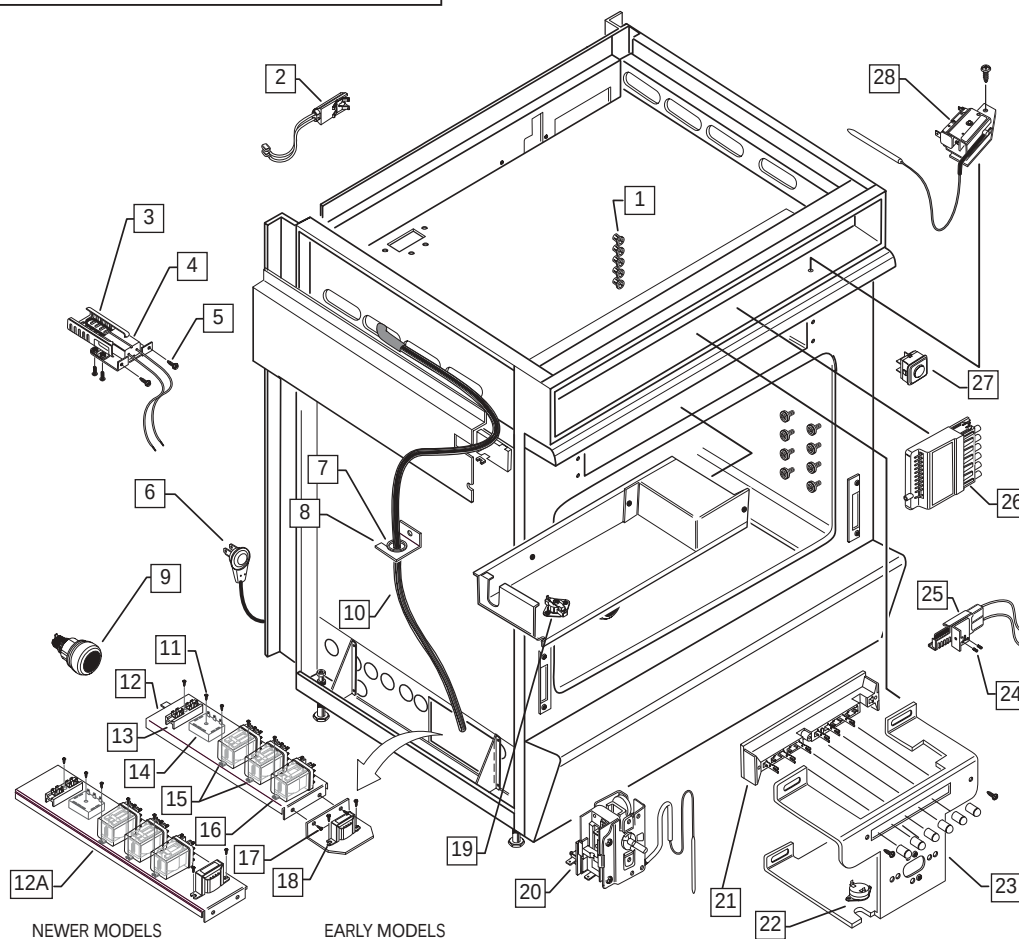


PRELIMINARY

ELECTRICAL ASSEMBLY

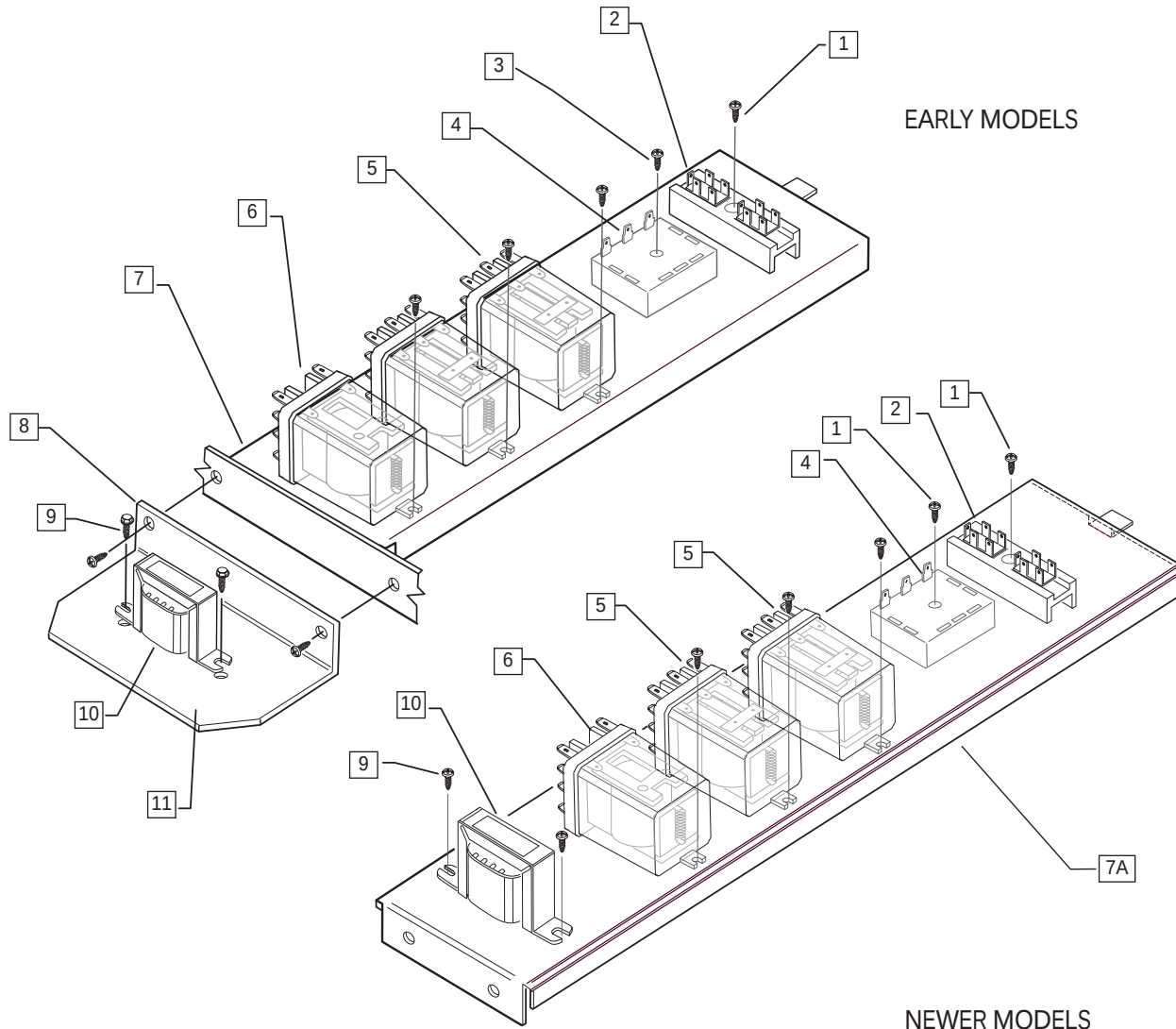
ITEM	PART NO.	DESCRIPTION
1	11238	GRMTS, IGN, WIRE (5 PLCS)
2	16046-02	PILOT LIGHT ASSY (5)
3	16009-1	BROIL IGNITER ASSY
4	91244	IGNITER BRACKET
5	15001-03	SCREW (2 PLCS)
6	16430	CORD, POWER RIGHT ANGLE
7	14197	GROMMET
8	50097	BRACKET, HARNESS
9	16242	OVEN LIGHT ASSEMBLY (2)
10	14304-03	WIRE HARNESS
11	15001-31	SCREW
12	91509	ELEC. COMPONENTS BRACKET
12A	91509	(NEW) ELEC. COMPONENTS BRACKET
13	16352	TERMINAL BLOCK
14	16044-2	CLEAN TIMER

ITEM	PART NO.	DESCRIPTION
15	16045-3	RELAY (2)
16	16045-2	RELAY
17	15001-19	SCREW (2 PLCS)
18	16464	TRANSFORMER
19	13043	HI TEMP CUT OUT </td
20	13380	THERMOSTAT ASSEMBLY
21	16399	6 PUSH BUTTON SWITCH
22	16041	BLOWER THERMOSTAT
23	91243	BRACKET, SUB PANEL
24	15002-18	SCREW (2 PLCS)
25	16505	OVEN IGNITER ASSY
26	16458	5 BURNER MODULE
27	16127	OVEN IGNITER SWITCH
28	13233	LOCK THERMOSTAT



LOWER ELECTRICAL ASSEMBLY

ITEM	PART NO.	DESCRIPTION
1	15001-31	SCREW
2	16352	TERMINAL BLOCK
3	15001-31	SCREW (2 PLCS)
4	16044-2	CLEAN TIMER
5	16045-3	RELAY (2 PLCS)
6	16045-2	RELAY
7	91509	ELEC. COMPONENTS BRACKET
7A	91509	(NEW) ELEC. COMPONENTS BRACKET
8	15001-19	SCREW (2PLCS)
9	15001-41	SCREW
10	16464	TRANSFORMER
11	91711	TRANSFORMER BRACKET



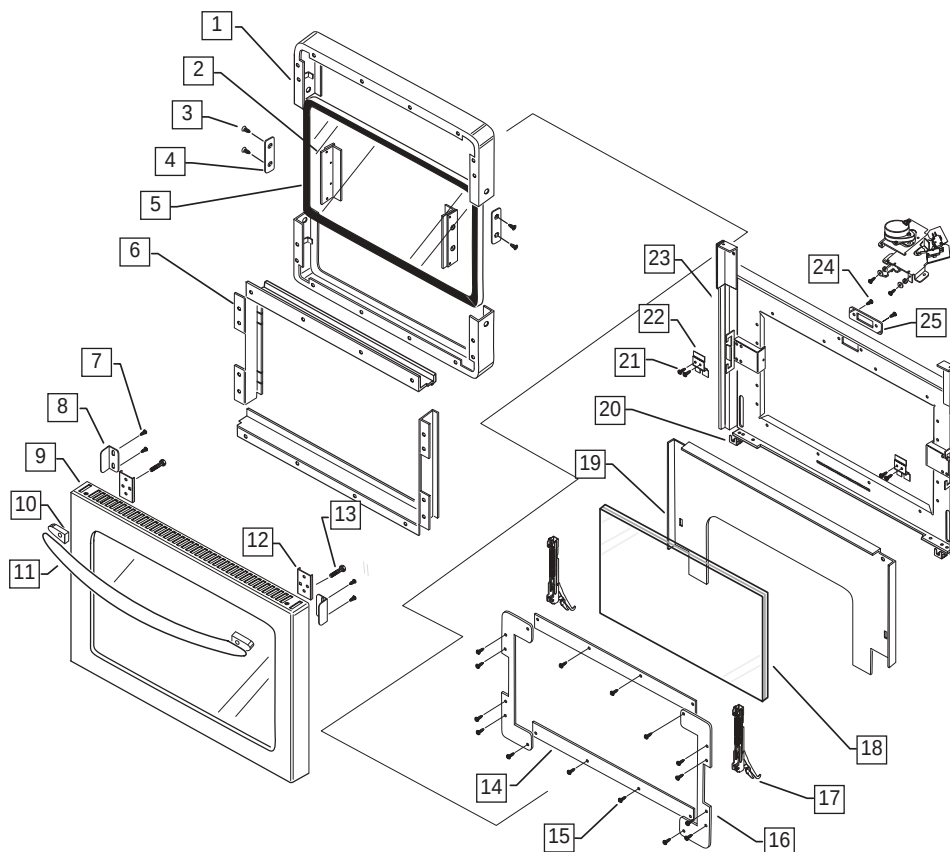
PRELIMINARY

DOOR ASSEMBLY

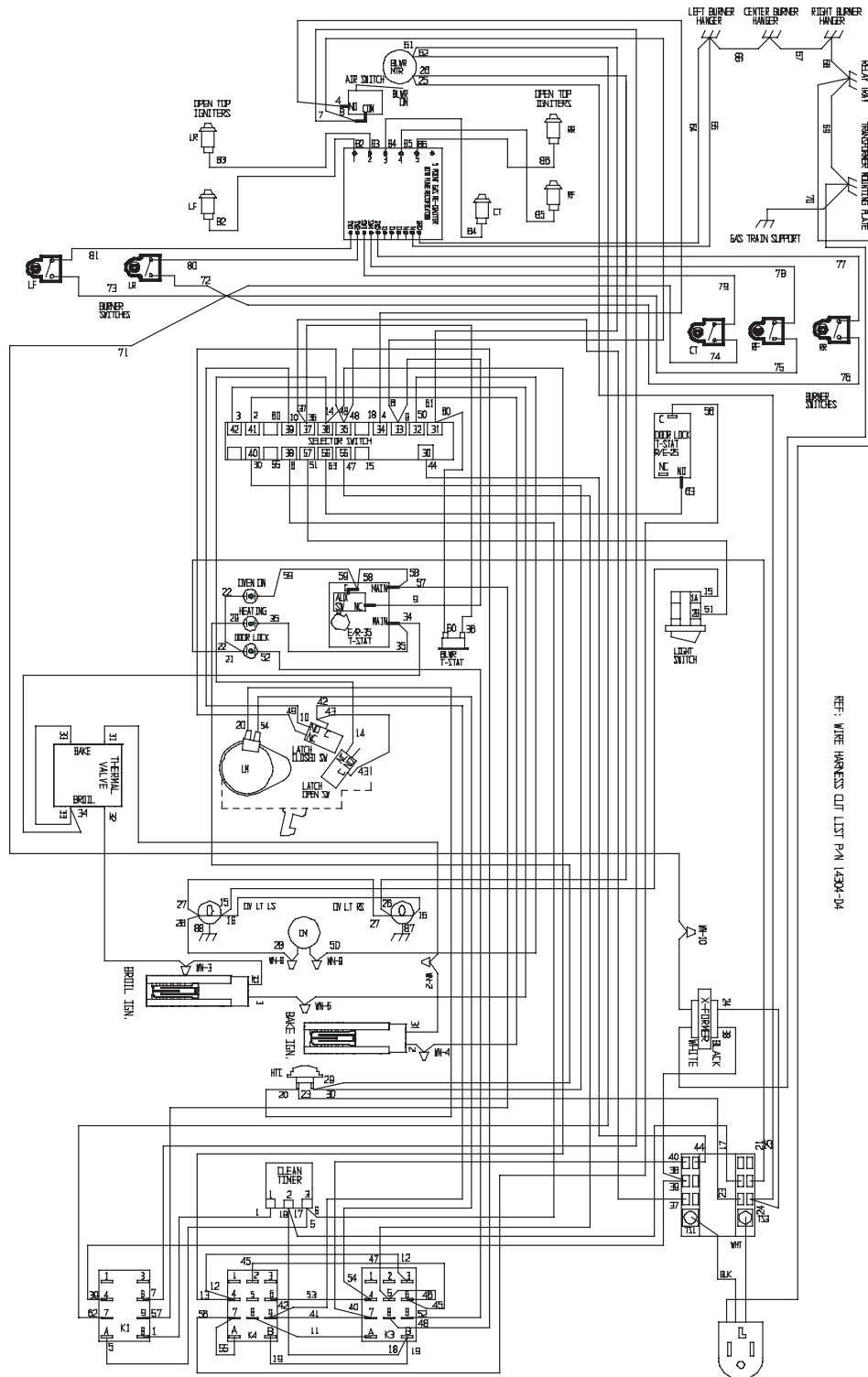
ITEM	PART NUMBER	DESCRIPTION
*		DOOR ASSEMBLIES:
	91687	• STAINLESS STEEL
	91687-01	• WHITE
	91687-02	• BLACK
1	91532	SEAL DOOR UPPER
2	96168	SPACER, SEAL CHANNEL
3	15002-43	SCREW (4 PLCS)
4	96166	COVER, DOOR SEAL
5	14296-01	INSIDE DOOR GLASS
6	91533	DOOR INSULATION COVER
7	15001-13	SCREW
8	91694	SHIELD, DOOR, TOP
9	91528-01/-03	DOOR SKIN
*	(PRO/PSH)	DOOR SKIN NO LOGO:
	91529-01-PA	• STAINLESS STEEL
	91529-03-PA	• WHITE
	91529-04-PA	• BLACK
*		DOOR SKIN, EURO
	92032-01	• STAINLESS STEEL
	92032-02	• WHITE
	92032-03	• BLACK

ITEM	PART NUMBER	DESCRIPTION
10	12167	SPACER (2 PLCS)(BRT CHROME)
11	12239	DOOR HANDLE
12	96012	HANDLE STIFFENER (2 PLCS)
13	15002-47	BOLT,1/4-28 UNF-2AX1.25GDS(4)
14	91530	COVER GLASS TOP/BOTTOM
15	15001-14	SCREW (16 PLCS)
16	91531	COVER GLASS SIDES (2 PLCS)
17	150034-1	DOOR HINGE
18	14297-01	INNER DOOR GLASS
19	91536	DOOR HEAT SHIELD
20	96021	HINGE BOTTOM PLATE
21	15001-09	SCREW (4 PLCS)
22	91524	HINGE TOP BRACKET
23	91655-PC	LINER, DOOR WLDMT
24	15001-09	SCREW (2 PLCS)
25	50046-1	LATCH PLATE-30

* Items not shown



WIRING DIAGRAM



PRELIMINARY



SERVICE

For warranty service, please contact your local service provider or DCS Customer Care Center at (888) 281-5698, Monday thru Friday, 6:00 am – 4:30 pm PST. Before you call, please have the following information ready:

- Model Number
- Serial Number
- Date of installation
- A brief description of the problem

Your satisfaction is of the utmost importance to us. If a problem cannot be resolved to your satisfaction, please write or fax us at:

Write:

DCS
Attention: Customer Care Center
5800 Skylab Road
Huntington Beach, CA 92647

email: support@dcsappliances.com

PRELIMINARY

WARRANTY

Length of Warranty:

One (1) Year Full parts and Labor Covers the entire product.

Five (5) Year Surface burners, Oven burner.

Ten (10) Years Limited Porcelain oven, Porcelain inner door panel.

DCS Will Pay For

All repair labor and parts found to be defective due to materials or workmanship for one full year "IN HOME" warranty during the first year of ownership. This does not apply if the unit was subjected to other than normal household use. Service must be provided by an Authorized Factory Agent during normal working hours. No charges will be made for repair or replacement at the location of initial installation or factory for parts returned pre-paid, through the dealer and claimed within the warranty period, and found by DCS to be defective.

Replacement will be F.O.B. DCS, and DCS will not be liable for any transportation costs, labor costs, or export duties. This warranty shall not apply, nor can we assume responsibility for damage that might result from failure to follow manufactures instructions or local codes, where the appliance has been tampered with or altered in anyway or which, in our judgement, has been subjected to misuse, negligence, or accident. Implied warranty shall not extend beyond the duration of this written warranty. This warranty is in lieu of all warranties expressed or implied and all other obligations or liability in connection with the sale of this appliance.

DCS Will Not Pay For

- Installation or start-up.
- Shipping damage.
- Service by an unauthorized agency.
- Damage or repairs due to service by an unauthorized agency or the use of unauthorized parts.
- Service during other than normal working hours.
- Improper installation, such as improper hook-up, etc.
- Service visits to teach you how to use the appliance; correct the installation; reset circuit breakers or replace home fuses.
- Repairs due to other than normal household use.
- Damage caused from accident, abuse, alteration, misuse, incorrect installation or installation not in accordance with local codes.
- Units installed in non-residential application such as day care centers, bed and breakfast centers, churches, nursing homes, restaurants, hotels, schools, etc.

This warranty applies to appliances used in residential applications; it does not cover their use in commercial situations. This warranty is for products purchased and retained in the 50 states of the U.S.A., the District of Columbia and Canada. This warranty applies even if you should move during the warranty period. Should the appliance be sold by the original purchaser during the warranty period, the new owner continues to be protected until the expiration date of the original purchaser's warranty period. This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

PRELIMINARY



PERFECT HEAT.

5800 Skylab Road, Huntington Beach, CA 92647

Tel: 714.372.7000 • Fax: 714.372.7001

Customer Service: (888) 281-5698

www.dcsappliances.com

As product improvement is an ongoing process at DCS, we reserve the right to change specifications or design without notice.

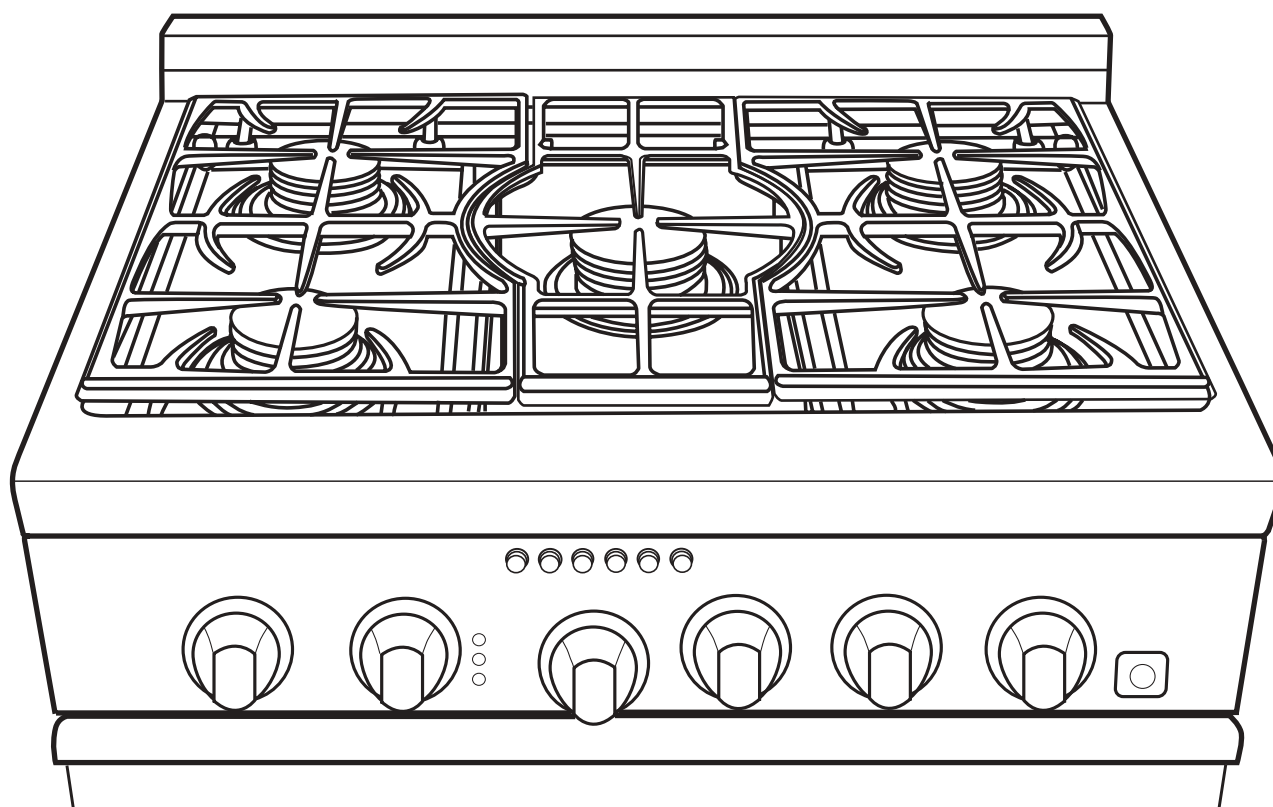
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Litho in USA 07/2003



PERFECT HEAT.

30" FIVE BURNER SELF CLEANING GAS RANGE

Service Manual



MODELS:

RGSC-305SS

RGSC-305BK

RGSC-305WT

